Unit 3 - Array:

MCQ OF unit -3

1. Which of the following correctly declares an array?
a) int array[10];
b) int array;
c) array{10};
d) array array[10];
View Answer
Answer: a
Explanation: Because array variable and values need to be declared after the datatype only.

2. What is the index number of the last element of an array with 9 elements?
a) 9
b) 8
c) 0
d) Programmer-defined
View Answer
Answer: b
Explanation: Because the first element always starts at 0. So it is on 8 position.

3. What is the correct definition of an array?
a) An array is a series of elements of the same type in contiguous memory locations
b) An array is a series of element
c) An array is a series of elements of the same type placed in non-contiguous memory locations
d) An array is an element of the different type
View Answer
Answer: a
Explanation: Correct definition of an array is An array is a series of elements of the same type in contiguous memory locations.

4. Which of the following accesses the seventh element stored in array?
a) array[6];
b) array[7];
c) array(7);
d) array;
View Answer
Answer: a
Explanation: The array location starts from zero, So it can accessed by array[6].

5. Which of the following gives the memory address of the first element in array?
a) array[0];

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b) array[1];
c) array(2);
d) array;
View Answer
Answer: d
Explanation: To get the address of ith index of an array, we use following syntax (arr + i). So as we need address of first index we will use (arr + 0) equivalent to arr.

6. What will be the output of the following C++ code?

```
1.    #include <stdio.h>
2.    #include<iostream>
3.    using namespace std;
4.    int array1[] = {1200, 200, 2300, 1230, 1543};
5.    int array2[] = {12, 14, 16, 18, 20};
6.    int temp, result = 0;
7.    int main()
8.    {
9.        for (temp = 0; temp < 5; temp++)
10.       {
11.           result += array1[temp];
12.       }
13.       for (temp = 0; temp < 4; temp++)
14.       {
15.           result += array2[temp];
16.       }
17.       cout << result;
18.       return 0;
19.   }
```

a) 6553
b) 6533
c) 6522
d) 12200
View Answer
Answer: b
Explanation: In this program we are adding the every element of two arrays. Finally we got output as 6533.
Output:

```
$ g++ array.cpp
$ a.out
6533
```

7. What will be the output of the following C++ code?

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```
1.    #include <stdio.h>
2.    #include<iostream>
3.    using namespace std;
4.    int main ()
5.    {
6.        int array[] = {0, 2, 4, 6, 7, 5, 3};
7.        int n, result = 0;
8.        for (n = 0; n < 8; n++)
9.        {
10.            result += array[n];
11.        }
12.        cout << result;
13.        return 0;
14.    }
```

a) 25
b) 26
c) 27
d) 21
View Answer
Answer: c
Explanation: We are adding all the elements in the array and printing it. Total elements in the array is 7, but our for loop will go beyond 7 and add a garbage value.

8. What will be the output of the following C++ code?

```
1.    #include <stdio.h>
2.    #include<iostream>
3.    using namespace std;
4.    int main()
5.    {
6.        int a = 5, b = 10, c = 15;
7.        int arr[3] = {&a, &b, &c};
8.        cout << *arr[*arr[1] - 8];
9.        return 0;
10.    }
```

a) 15
b) 18
c) garbage value
d) compile time error
View Answer
Answer: d
Explanation: The conversion is invalid in this array. So it will arise error. The

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following compilation error will be raised:
cannot convert from 'int *' to 'int'
This is because &a, &b and &c represent int* whereas the array defined is of int type.

9. What will be the output of the following C++ code?

```
#include <stdio.h>
#include <iostream>
using namespace std;
int main()
{
    char str[5] = "ABC";
    cout << str[3];
    cout << str;
    return 0;
 }
```

a) ABC
b) ABCD
c) AB
d) AC
View Answer
Answer: a
Explanation: We are just printing the values of first 3 values.

```
$ g++ array.cpp
$ a.out
ABC
```

10. What will be the output of the following C++ code?

```
#include <stdio.h>
#include <iostream>
using namespace std;
int main()
{
    int array[] = {10, 20, 30};
    cout << -2[array];
    return 0;
}
```

a) -15
b) -30
c) compile time error

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d) garbage value
View Answer
Answer: b
Explanation: It's just printing the negative value of the concern element.

```
$ g++ array.cpp
$ a.out
-30
```

11. Which of the header file is used for array type manipulation?
a) <array>
b) <type_traits>
c) <iostream>
d) std namespace
View Answer
Answer: d
Explanation: Array type manipulation functions are declared incside the namespace std so you can use namespace std to use these functions.

12. What is the use of is_array() function in C++?
a) To check if a variable is array type or not
b) To check if a variable is 1-D array type or not
c) To check if a variable is 2-D array type or not
d) To check if a variable is 1-D or 2-D array type or not
View Answer
Answer: a
Explanation: is_array() function is used to check whether a given variable is of array type or not.

13. What will be the output of the following C++ code?

```
#include <iostream>
#include <string>
using namespace std;
int main()
{
        cout<<is_array<int>::value;
        cout<<is_array<char[10]>::value;
        cout<<is_array<string>::value;
        return 0;
}
```

a) 010
b) 101
c) 001

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d) 110
View Answer
Answer: a
Explanation: As int and string are not of array type therefore 0 is printed corresponding to them and char[10] is an array of character of size 10 therefore 1 is printed corresponding to this. Hence answer is 010.

14. What is the use of is_same() function in C++?
a) To check if a variable is array type or not
b) To check whether two variables have the same characteristics
c) To check if two variable is of array type or not
d) To check whether two variables are different or not
View Answer
Answer: b
Explanation: is_same() function is used to check whether two variables have the same characteristics or not.

15. What will be the output of the following C++ code?

```
#include <iostream>
#include <string>
using namespace std;
int main()
{
        cout<<is_same<int,char>::value;
        cout<<is_same<char[10], char[10]>::value;
        cout<<is_same<char*[10], string>::value;
        return 0;
}
```

a) 011
b) 101
c) 010
d) 110
View Answer
Answer: c
Explanation: In 1st and 3rd case both the variables passed to is_same() function are different whereas for 2nd they are same. Hence the answer is 010.

16. What is the use of rank() function in C++?
a) Returns size of each dimension
b) Returns how many total elements can be stored in an array
c) Returns how many elements are in array currently

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d) Returns the dimension of an array
View Answer
Answer: d
Explanation: rank() function returns the rank of the array i.e. the dimension of an array. For example, int arr[10][10] has rank 2.

17. What will be the output of the following C++ code?

```
#include <iostream>
#include <string>
using namespace std;
int main()
{
        cout<<rank<int[10]>::value;
        cout<<rank<char[10][10]>::value;
        cout<<rank<string[10][10][10]>::value;
        return 0;
}
```

a) 111
b) 123
c) 321
d) 121
View Answer
Answer: b
Explanation: In this program first array has the single dimension, second one has two dimensions and third one has three dimension therefore the program prints 123.

18. Which of the following is correct about extent() function?
a) Returns how many elements are in array currently
b) Returns the size of the 1st dimension
c) Returns how many total elements can be stored in an array
d) Returns the size of a given dimension
View Answer
Answer: d
Explanation: The extent() function takes two parameters one denoting the array other showing the dimension for which the size we want to know.

19. What will be the output of the following C++ code?

```
#include <iostream>
#include <string>
using namespace std;
```


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```
int main()
{
        cout<<extent<string[10][20][30], 0>::value;
        cout<<extent<string[10][20][30], 1>::value;
        cout<<extent<string[10][20][30], 2>::value;
        return 0;
}
```

a) 101010
b) 102030
c) 302010
d) 102010

View Answer

Answer: b

Explanation: In first cout we are passing 0 and size of first dimension of array is 10 therefore 10 is printed. In following cases we have passed 1 and 2 therefore 20 and 30 are printed respectively.

20. Which of the following is correct about remove_extent() function?
a) Removes the given dimension from an array
b) Removes the first dimension from the right of the array
c) Removes the first dimension from the left of the array
d) Removes the last dimension from the left of the array

View Answer

Answer: c

Explanation: remove_extent() function removes the first dimension i.e. the first dimension from the given array.

21. What will be the output of the following C++ code?

```
#include <iostream>
#include <string>
using namespace std;
int main()
{
        cout<<rank<remove_extent<string[10][20]>::type>::value;
        cout<<rank<remove_extent<string[10][20][30]>::type>::value;
        return 0;
}
```

a) 11
b) 12
c) 21
d) 22

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Answer: b
Explanation: As we are removing the dimensions from these array and then printing the rank of arrays. Therefore as initially they have 2 and 3 as their rank so after deleting the rank becomes 1 and 2 hence the output is 12.

22. Which of the following is correct about remove_all_extents() function?
a) Removes the all dimension from an array
b) Removes the first dimension from the left of the array
c) Removes the first dimension from the right of the array
d) Removes the last dimension from the left of the array
View Answer
Answer: a
Explanation: As the name suggests remove_all_extent() function removes all the dimensions from the array. So rank os array after this operation becomes 0.

23. What will be the output of the following C++ code?

```
#include <iostream>
#include <string>
using namespace std;
int main()
{
        cout<<rank<remove_all_extents<string[10][20]>::type>::value;
        return 0;
}
```

a) 1
b) 0
c) Error
d) Segmentation fault
View Answer
Answer: b
Explanation: As we ahve deleted all the dimensions of this array therefore the rank of the array becomes zero hence the output is 0.

24. What will be the output of the following C++ code?

```
#include <iostream>
#include <string>
using namespace std;
int main()
{
        cout<<extent<remove_extent<string[10][20]>::type>::value;
        cout<<extent<remove_extent<string[10][20][30]>::type>::value;
        return 0;
```


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```
}
```

a) 1010
b) 1020
c) 2020
d) 2030

View Answer

Answer: c

Explanation: As we are deleting the first dimension from both the arrays and then printing the extent i.e. size of dimension therefore the answer is 2020 as both the array have 20 as the size of their second dimension.

25. What will be the output of the following C++ code?

```
#include <iostream>
#include <string>
using namespace std;
int main()
{
        cout<<extent<remove_all_extents<string[10][20][30]>::type>::value;
        return 0;
}
```

a) 20
b) 10
c) Error
d) 0

View Answer

Answer: d

Explanation: As we have removed all the dimensions from the array therefore the output of extent is 0.

26. What is the use of swap() function in array class?
a) Swaps two elements of an array given elements
b) Swaps two arrays
c) Swaps two elements given indices of elements
d) Swaps same elements of the array if required

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Answer: b

Explanation: swap() function is used to swap elements of two array classes provided the size of both arrays classes are same.

27. What is the syntax of swap()?
a) swap(arr1, arr2);

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b) arr1.swap(arr2);
c) swap<int, int>(arr1, arr2);
d) swap[arr1, arr2];
View Answer
Answer: b
Explanation: The correct syntax of swap function is arr1.swap(arr2) i.e. one array calling swap() function with second array as parameter to swap function. Also swap is a function therefore [] operator cannot be used to call swap function.

28. What will be the output of the following C++ code?

```
#include <iostream>
#include <array>

using namespace std;

int main(int argc, char const *argv[])
{
        array<int, 5> arr1 = {1,2,3,4,5};
        array<int, 5> arr2 = {6,7,8,9,10};
        arr1.swap(arr2);
        for(int i=0;i<5;i++)
                cout<<arr1[i]<<" ";
        cout<<endl;
        for(int i=0;i<5;i++)
                cout<<arr2[i]<<" ";
        cout<<endl;
        return 0;
}
```

a)

6 7 8 9 10

1 2 3 4 5

b)

1 2 3 4 5

6 7 8 9 10

c)

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6 7 8 9 10

6 7 8 9 10

d)

1 2 3 4 5

1 2 3 4 5

View Answer

Answer: a

Explanation: arr1 has elements from 1-5 and arr2 has elements 6-10 initially. After swapping arr1 has elements from 6-10 and arr2 has elements from 1-5. Therefore output is 6 7 8 9 10 then 1 2 3 4 5.

Output:

$ ./a.out

6 7 8 9 10

1 2 3 4 5

29. What will be the output of the following C++ code?

```
#include <iostream>
#include <array>

using namespace std;

int main(int argc, char const *argv[])
{
        array<int, 10> arr1 = {1,2,3,4,5};
        array<int, 5> arr2 = {6,7,8,9,10};
        arr1.swap(arr2);
        for(int i=0;i<5;i++)
                cout<<arr1[i]<<" ";
        cout<<endl;
        for(int i=0;i<5;i++)
                cout<<arr2[i]<<" ";
        cout<<endl;
        return 0;
}
```


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a)

6 7 8 9 10

1 2 3 4 5

b)

1 2 3 4 5

6 7 8 9 10

c) Error
d) Segmentation fault
View Answer
Answer: c
Explanation: As the size of both the array classes is not equal therefore the swap function gives an error stating that no matching function available.

30. What is the use of empty() function in array classes?
a) To check whether the size of an array is zero or not
b) To check whether an array is empty or not
c) To check how many elements are there in the array
d) To check whether an array contains negative elements or not
View Answer
Answer: a
Explanation: empty() function is used to check whether the size of an array class is zero or not. It is not used to check whether an array is empty or not. The function true only if size/max_size of an array is zero otherwise it returns false.

6. What is the use of fill() function in array class?
a) To fill an array with a given single value
b) To delete all the elements that are equal to the given value
c) To replace all the elements of the array which are equal to the given value
d) To check whether given element fills the array or not
View Answer
Answer: a
Explanation: fill() function is used to fill an array class with the given single value.

31. What will be the output of the following C++ code?

```
#include <iostream>
#include <array>
```


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```
using namespace std;

int main(int argc, char const *argv[])
{
        array<int, 5> arr1;
        arr1.fill(2);
        for(int i=0;i<5;i++)
                cout<<arr1[i];
        cout<<endl;
        return 0;
}
```

a) 22222
b) 20000
c) 00002
d) 20002
View Answer
Answer: a
Explanation: fill() function sets the value of each element equal to the value passed as parameter to the function.

32. What will be the output of the following C++ code?

```
#include <iostream>
#include <array>

using namespace std;

int main(int argc, char const *argv[])
{
        int arr1[5] = {1,2,3,4,5};
        int arr2[5] = {6,7,8,9,10};
        arr1.swap(arr2);
        for(int i=0;i<5;i++)
                cout<<arr1[i]<<" ";
        cout<<endl;
        for(int i=0;i<5;i++)
                cout<<arr2[i]<<" ";
        cout<<endl;
        return 0;
}
```

a)

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6 7 8 9 10

1 2 3 4 5

b)

1 2 3 4 5

6 7 8 9 10

c) Error
d) Segmentation fault
View Answer
Answer: c
Explanation: swap() function is used for swapping two array classes not two C-like arrays. Therefore the swap() function gives error.

33. What will be the output of the following C++ code?

```
#include <iostream>
#include <array>

using namespace std;

int main(int argc, char const *argv[])
{
        array<int,5> arr1;
        arr1.fill(5);
        cout<<get<5>(arr1);
        return 0;
}
```

a) 5
b) Compile-time error
c) Run-time error
d) Segmentation fault
View Answer
Answer: b
Explanation: The compiler detects that the array class size is 5 and we are trying to access the 5th index which is out of bound therefore the program gives error.

34. What happens when both of the following C++ programs are compiled and executed?

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```
===== Program 1 =====
#include <iostream>
#include <array>

using namespace std;

int main()
{
          array<int,5> arr1;
          arr1.fill(5);
          cout<<get<5>(arr1);
          return 0;
}
=====================
===== Program 2 =====
#include <iostream>
#include <array>

using namespace std;

int main()
{
          array<int,5> arr1;
          arr1.fill(5);
          cout<<arr1.at(5);
          return 0;
}
=====================
```

a) Program 1 gives compile-time error and Program 2 gives run-time error
b) Program 1 gives run-time error and Program 2 gives compile-time error
c) Both programs results into compile-time error
d) Both programs results into run-time error

View Answer

Answer: a

Explanation: The Program 1 gives compile-time error whereas Program 2 gives run-time error. This is because get() function takes constant integer as the argument for accessing element of the array, therefore at compile time only the compiler verifies whether the index is accessible or not as we know the array class size during compile time, Whereas in case of at() function it takes variable as the parameter for accessing element, therefore the index range is checked during run-time therefore the error is detected during run-time.

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35. Which of the following is the default return value of functions in C++?
a) int
b) char
c) float
d) void
View Answer
Answer: a
Explanation: C++ uses int as the default return values for functions. It also restricts that the return type of the main function must be int.

36. What happens to a function defined inside a class without any complex operations (like looping, a large number of lines, etc)?
a) It becomes a virtual function of the class
b) It becomes a default calling function of the class
c) It becomes an inline function of the class
d) The program gives an error
View Answer
Answer: c
Explanation: Any function which is defined inside a class and has no complex operations like loops, a large number of lines then it is made inline.

37. What is an inline function?
a) A function that is expanded at each call during execution
b) A function that is called during compile time
c) A function that is not checked for syntax errors
d) A function that is not checked for semantic analysis
View Answer
Answer: a
Explanation: Inline function is those which are expanded at each call during the execution of the program to reduce the cost of jumping during execution.

38. An inline function is expanded during _____
a) compile-time
b) run-time
c) never expanded
d) end of the program
View Answer
Answer: a
Explanation: An inline function is expanded during the compile-time of a program.

39. In which of the following cases inline functions may not word?
i) If the function has static variables.
ii) If the function has global and register variables.
iii) If the function contains loops

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iv) If the function is recursive
a) i, iv
b) iii, iv
c) ii, iii, iv
d) i, iii, iv
View Answer
Answer: d
Explanation: A function is not inline if it has static variables, loops or the function is having any recursive calls.

40. When we define the default values for a function?
a) When a function is defined
b) When a function is declared
c) When the scope of the function is over
d) When a function is called
View Answer
Answer: b
Explanation: Default values for a function is defined when the function is declared inside a program.

41. Where should default parameters appear in a function prototype?
a) To the rightmost side of the parameter list
b) To the leftmost side of the parameter list
c) Anywhere inside the parameter list
d) Middle of the parameter list
View Answer
Answer: a
Explanation: Default parameters are defined to the rightmost side of parameter list in a function to differentiate between the normal and default parameters for example if a function is defined as fun(int x = 5, int y) then if we call fun(10) then 10 should be given to x or y because one can apply both logics like x = 10 already defined and 10 passed is for y but if compiler reads it from left to right it will think it is for x and no parameter is given for y, therefore, the compiler will give error.

42. If an argument from the parameter list of a function is defined constant then _____
a) It can be modified inside the function
b) It cannot be modified inside the function
c) Error occurs
d) Segmentation fault
View Answer
Answer: b
Explanation: A function is not allowed a constant member of the parameter list.

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43. Which of the following feature is used in function overloading and function with default argument?
a) Encapsulation
b) Polymorphism
c) Abstraction
d) Modularity
View Answer
Answer: b
Explanation: Both of the above types allows a function overloading which is the basic concept of Polymorphism.

44. What will be the output of the following C++ code?

```
#include<iostream>
using namespace std;

int fun(int x = 0, int y = 0, int z)
{  return (x + y + z); }

int main()
{
   cout << fun(10);
   return 0;
}
```

a) 10
b) 0
c) Error
d) Segmentation fault
View Answer
Answer: c
Explanation: Default arguments should always be declared at the rightmost side of the parameter list but the above function has a normal variable at the rightmost side which is a syntax error, therefore the function gives an error.

45. What will be the output of the following C++ code?

```
#include<iostream>
using namespace std;

class Test
{
  protected:
    int x;
```


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```
  public:
    Test (int i):x(i) { }
    void fun() const  { cout << "fun() const " << endl; }
    void fun()        {  cout << "fun() " << endl;     }
};

int main()
{
    Test t1 (10);
    const Test t2 (20);
    t1.fun();
    t2.fun();
    return 0;
}
```

a)

fun()

fun() const

b)

fun() const

fun()

c)

fun()

fun()

d)

fun() const

fun() const

View Answer

46. What will be the output of the following C++ code?

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```
#include <iostream>
using namespace std;

int fun(int=0, int = 0);

int main()
{
  cout << fun(5);
  return 0;
}
int fun(int x, int y) { return (x+y); }
```

a) -5
b) 0
c) 10
d) 5
View Answer
Answer: d
Explanation: C++ allows to define such prototype of the function in which you are not required to give variable names only the default values. While in function definition you can provide the variable names corresponding to each parameter.

47. What will be the output of the following C++ code?

```
#include <iostream>
using namespace std;
void square (int *x, int *y)
{
        *x = (*x) * --(*y);
}
int main ( )
{
        int number = 30;
        square(&number, &number);
        cout << number;
        return 0;
}
```

a) 870
b) 30
c) Error
d) Segmentation fault
View Answer
Answer: a
Explanation: As we are passing value by reference therefore the change in the value

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is reflected back to the passed variable number hence value of number is changed to 870.

48. From which function the execution of a C++ program starts?
a) start() function
b) main() function
c) new() function
d) end() function
View Answer
Answer: b
Explanation: The execution of a C++ program starts from the main() function.

49. Which of the following is important in a function?
a) Return type
b) Function name
c) Both return type and function name
d) The return type, function name and parameter list
View Answer
Answer: c
Explanation: The important things required in a function is its return type and its name other than that parameter list are optional which a function may or may not have.

50. What is string objects in C++?
a) Stream of alphabets
b) A stream of well-defined characters
c) Stream of characters
d) A stream of characters terminated by \0
View Answer
Answer: b
Explanation: String is defined as streams of characters, not necessarily terminated by \0. Also, a string can contain characters other than alphabets.

52. What is Character-Array?
a) array of alphabets
b) array of well-defined characters
c) array of characters
d) array of characters terminated by \0
View Answer
Answer: c
Explanation: Character-Array is defined as an array of characters, not necessarily terminated by \0. Also, a character-array can contain characters other than alphabets.

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53. Pick the incorrect statement about Character-Array.
a) Character-Array can be terminated by a null character('\0')
b) Character-Array has a static size
c) Character-Array has a dynamic size
d) Character-Array has a threat of array-decay
View Answer
Answer: c
Explanation: As Character-Array is an array, its size should be defined during its declaration hence the size of Character-Array is static. A Character-Array is not necessarily to be terminated by a null character. Also, it has a threat of array-decay.

54. Pick the correct statement about string objects in C++.
a) String objects must be terminated by a null character('\0')
b) String objects have a static size
c) String objects have a dynamic size
d) String objects use extra memory than required.
View Answer
Answer: c
Explanation: String objects are dynamic in nature i.e. their size varies as their value changes so they don't use any extra memory and it is not necessary to terminate a string object by '\0'.

55. What will be the output of the following C++ code?


```
#include <iostream>
#include <string>
using namespace std;
int main(int argc, char const *argv[])
{
        string str;
        cin>>str;
        cout<<str;
        return 0;
}
```

a) str
b) Input provided by the user
c) Error
d) Segmentation fault
View Answer
Answer: b
Explanation: There is no error in the program and as we are asking the user to enter

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a string and printing that string to console. Therefore output will be the string provided by the user.

66. What will be the output of the following C++ code?

```
#include <iostream>
#include <string>
using namespace std;
int main(int argc, char const *argv[])
{
        char str[] = "Hello World";
        cout<<str[0];
        return 0;
}
```

a) H
b) e
c) Error
d) o

View Answer

Answer: a

Explanation: The program has no errors so and as str = “Hello World” and we are trying to print the first character of str. Hence “H” is the answer.

67. What will be the output of the following C++ code?

```
#include <iostream>
#include <string>
using namespace std;
int main(int argc, char const *argv[])
{
        char str[10];
        cin>>str;
        cout<<str;
        return 0;
}
```

a) Compiler-time Error
b) Run-time Error
c) Input given by the user
d) Depends on the length of the string entered by the user

View Answer

Answer: d

Explanation: As the character array size is 10 so if the string entered by the user is <= 10 then there will be no error and the program runs perfectly otherwise if the

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length is > 10 then the program gives a run-time error because the string crosses the allocated memory space.

68. What will be the output of the following C++ code if the string entered by the user is “Hello World”?

```
#include <iostream>
#include <string>
using namespace std;
int main(int argc, char const *argv[])
{
        string str;
        cin>>str;
        cout<<str;
        return 0;
}
```

a) Hello World
b) Hello
c) World
d) Error
View Answer
Answer: b
Explanation: As cin considers \n or space as the terminating symbols for the input so when the user enters “Hello World” so only “Hello” will be stored into the str variable as cin stops scanning input after space.
Output:
$ ./a.out

69. Which header file is used to include the string object functions in C++?
a) #include <string.h>
b) #include <cstring>
c) #include <string>
d) #include <string.cpp>
View Answer
Answer: c
Explanation: #include <string> header file is used as it contains all the string object functions.

70. What will be the output of the following C++ code?

```
#include <iostream>
#include <string>
using namespace std;
```


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```
int main(int argc, char const *argv[])
{
        char s1[6] = "Hello";
        char s2[6] = "World";
        char s3[12] = s1 + " " + s2;
        cout<<s3;
        return 0;
}
```

a) Hello World
b) Hello
c) World
d) Error
View Answer

71. What will be the output of the following C++ code?

```
#include <iostream>
#include <string>
using namespace std;
int main(int argc, char const *argv[])
{
        string s1 = "Hello";
        string s2 = "World";
        string s3 = s1 + " " + s2;
        cout<<s3;
        return 0;
}
```

a) Hello World
b) Hello
c) World
d) Error
View Answer

Answer: a
Explanation: The program runs perfectly as string class has defined the addition of two strings so when two strings are added then both the strings are concatenated. Hence the output is “Hello World”.

72. Which of the following is correct way of concatenating two string objects in C++?

```
way 1:
string s1 = "hello";
string s2 = "world";
string s3 = s1 + s2;
```


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```
way 2:
string s1 = "hello";
string s2 = "world";
string s3 = s1.append(s2);

way 3:
string s1 = "hello";
string s2 = "world";
string s3 = strcat(s1,s2);
```

a) 1 and 2
b) 2 and 3
c) 1 and 3
d) 1, 2 and 3
View Answer
Answer: a
Explanation: To concatenate two string objects we are provided with either direct addition or append() function in string class but strcat() is char* function hence they cannot be used to concatenate two string objects.

73. Which of the following is not a modifier function in string class?
a) operator+=()
b) operator[]()
c) push_back()
d) erase()
View Answer
Answer: b
Explanation: [] operator is used to access one of the characters of the string objects whereas other functions are used to modify the string in some way.

74. Which function is used to get the length of a string object?
a) str.length()
b) str.size()
c) str.max_size()
d) both size() and length() function
View Answer
Answer: d
Explanation: Both size() and length() are used to get the size of the string objects.

75. What is the identifier given to string class to declare string objects?
a) String
b) string
c) STRING
d) Any

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