***1 #include<iostream>***

***intmain()***

***{***

***cout<< "\"geeksforgeeks\"";***

***}***

***ANS:*** N There are several errors in the given code:

Typo in the function name: The function name should be "int main()" instead of "intmain()". There should be a space between "int" and "main".

Missing namespace declaration: The code is missing the "using namespace std;" declaration after the "#include<iostream>" line. This declaration is required to use the "cout" object from the "std" namespace without explicitly specifying it as "std::cout".

2***. What will be the output of the following program***

***#include <iostream>***

***usingnamespacestd;***

***intmain()***

***{***

***intx = 10;***

***inty = 10;***

***if(!(x ^ y))***

***cout<< " x is equal to y ";***

***else***

***cout<< " x is not equal to y ";***

***return0;***

***}***

ANS: The program will not compile and will result in an error. The issue is with the line usingnamespacestd;, which contains a typo. The correct syntax is using namespace std; with a space between using and namespace. The corrected code is as follows:

#include <iostream>

using namespace std;

int main()

{

int x = 10;

int y = 10;

if (!(x ^ y))

cout << "x is equal to y ";

else

cout << "x is not equal to y ";

return 0;

}

OUTPUT:

**x is X IS EQUAL TO Yo y**

**3.** **Find the output of the following program**

**#include<iostream>**

**usingnamespacestd;**

**intN = 10;**

**intmain()**

**{**

**staticintx = 1;**

**if(cout<< x << " "&& x++ < N &&main())**

**{ }**

**return0;**

**}**

ANS: OUTPUT

**12345678910**

4***. Identify the error / output of the program***

***#include<bits/stdc++.h>***

***usingnamespacestd;***

***intmain()***

***{***

***intx = 10;***

***inty = seventy;***

***x = x + y;***

***y = x - y;***

***x = x - y;***

***cout<< "X : "<< x << "\n";***

***cout<< "Y : "<< y << "\n";***

***return0;***

***}***

**ANS :** The line using namespace std; should have a space between using and namespace.

The variable y is declared as inty = seventy, which is not a valid integer value. It should be int y = 70.

The program does not include the necessary header files for input/output operations and for using the cout statement. It should include <iostream> at the beginning.

The program logic for swapping the values of x and y is incorrect. It should be:

OUTPUT:

X**X=70** X=70

Y**Y=10** Y=10

***5. Can we do in C++ with this header file.***

***#include<bits/stdc++.h>***

***intmain ()***

***{***

***inta = 15, b = 20;***

***printf("max = %d\n", ((a + b) + abs(a - b)) / 2);***

***printf("min = %d", ((a + b) - abs(a - b)) / 2);***

***return0;***

***}***

ANS: Yes, it is possible to write the given code in C++ with the bits/stdc++.h header file. However, it is generally not recommended to use this header file in production code as it includes all the standard headers and can lead to longer compilation times and potential conflicts with other header files.

***6. Find the output for the program.***

***#include<iostream>***

***usingnamespacestd;***

***intmain()***

***{***

***inta = 5;***

***intb = 5;***

***intsum = -( -a-b );***

***cout<< sum;***

***return0;***

***}***

ANS: OUTPUT:

**10**

***7. What is the output***

***#include<iostream>***

***usingnamespacestd;***

***intmain()***

***{***

***if(!(cout<< "SIMATS"))***

***cout<<" SIMATS ";***

***else***

***cout<< "SCHOOL OF ENGINEERING ";***

***return0;***

***}***

***ANS:***

The output of this code will be "SIMATS".

Explanation:

The code uses an if-else statement to print either "SIMATS" or "SCHOOL OF ENGINEERING". However, the if statement condition is a bit unusual. It uses the logical NOT operator "!" to negate the result of the "<<" operator used with cout.

The "<<" operator is used for outputting text to the console, and it returns a reference to the cout object. The logical NOT operator will return false if the output operation fails. In other words, if the output of "SIMATS" to the console is successful, the condition will evaluate to false, and the else statement will not be executed.

Therefore, the output will only be "SIMATS" and not "SCHOOL OF ENGINEERING".

***9. Find the output***

***#include<iostream>***

***usingnamespacestd;***

***intmain()***

***{***

***intn = 4;***

***n = n >> 2;***

***cout<< n;***

***return0;***

***}***

***ANS*** : THE output of this code will be 1.

Explanation:

The code defines a variable "n" and initializes it to 4. Then the "n" is shifted to the right by 2 bits using the bitwise right shift operator (>>), which effectively divides "n" by 2 raised to the power of 2 (i.e., 4).

The resulting value of "n" after the shift operation is 1 (since 4 >> 2 is equivalent to 1).

Finally, the value of "n" is printed to the console using the "cout" statement, which outputs 1 as the final result.