

Custom Search

COURSES



HIRE WITH US

## Output of C++ programs | Set 21



What will be the output of this program?

```
#include<iostream>
using namespace std;
int x; // Global x

int main()
{
    int x = 10; // Local x
    cout << "Value of global x is " << ::x << endl;
    cout << "Value of local x is " << x;
    return 0;
}
```

Output:

```
Value of global x is 0
Value of local x is 10
```

In C++, global variable (if we have a local variable with same name), can be accessed using scope resolution operator (::).

What will be the output of this program?

```
#include <iostream>
using namespace std;
int a = 90;

int fun(int x, int *y = &a)
{
    *y = x + *y;
    return x + *y;
}

int main()
{
    int a = 5, b = 10;
```





See how your visitors are really using your website.

TRY IT FOR FREE

HIDE AD • AD VIA BUYSPELLADS

```

    b = fun(::a,&a);
    cout << a << " " << b << endl;

    return 0;
}

```

```

100  10
195  290

```

There are two variables with name 'a', one is global and other is local. When we call **a = fun(a)**, it calls `int fun(int x, int *y=&a)`, here pointer to global variable (which is a = 90) is assigned to y. Therefore.

```
*y = x + *y; // becomes 5 + 90
```

```
return x + *y; // becomes 5 + 95
```

### What will be the output of this program?

```

#include <iostream>
using namespace std;
int a = 2;

int fun(int *a)
{
    ::a *= *a;
    cout << ::a << endl;
    return *a;
}

int main()
{
    int a = 9;
    int &x = ::a;

    ::a += fun(&x);
    cout << x;
}

```

Output:

```

4
8

```

The global variable is being accessed by the function fun every time using `::a`. The local variable value doesn't impact on the value of a.

### What will be the output of this program?



```

{
    char *A[] = { "abcx", "dbba", "cccc"};
    char var = *(A+1) - *A+1;
    cout << (*A + var);
}

```



prog.cpp: In function 'int main()':

```

prog.cpp:6:38: warning: ISO C++ forbids converting a string constant to 'char
    char *A[] = { "abcx", "dbba", "cccc"};
                                     ^

```

```

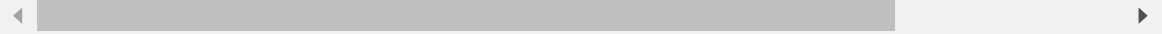
prog.cpp:6:38: warning: ISO C++ forbids converting a string constant to 'char

```

```

prog.cpp:6:38: warning: ISO C++ forbids converting a string constant to 'char

```



### Output:

bba

Here the array representation is  $A[0] = \text{"abcx"} , A[1] = \text{"dbba"} , A[2] = \text{"cccc"}$ . Precedence of  $(\text{pointer})^* > (\text{binary}) +$ , and order of execution of  $'*'$  is right to left. If  $'A'$  address is  $'x'$  then address of  $'*(A+1)'$  is  $'x+6'$  and address of  $'*A+1'$  is  $'x+1'$ . So integer value of  $\text{var} = 6$  (total no of character between two points  $(x+6)-(x+1)+1$ ). During printing the operator  $'+'$  is overloaded now the pointer points to  $'x+7'$ . For this reason the output of the program.

### What will be the output of this program?

```

#include <iostream>
using namespace std;

int main()
{
    char a = 'a', b = 'x';
    char c = (b ^ a >> 1 * 2) +(b && a >> 1 * 2 );
    cout << " c = " << c;
}

```

### Output:

c = 97

Integer value of  $a = 97$  (011100001), integer value of  $b = 120$  (011111000), precedence of  $'*' > '>>'$   $> '^' > '&\&'$ .

So expression is  $'((b ^ (a >> (1 * 2))) - (b \&\& (a >> (1 * 2))))'$ . Integer Value of expression  $a >> 1 * 2 = 24$   $b ^ a >> 1 * 2 = 96$   $b \&\& a >> 1 * 2 = 1$  which is 97.





See how your visitors are really using your website.

TRY IT FOR FREE

HIDE AD • AD VIA BUYSPELLADS

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

int main()
{
    int i = 5, j = 3;
    switch(j)
    {
        case 1:
            if (i < 10) cout << "\ncase 1";
            else if (i > 10)
                case 2:
                    cout << "case 2";
            else if (i==10)
                case 3:
        default:
            cout << "case 3";
            cout << "hello";
    }
}
```

Output:

case 3hello

Since j=3 satisfies the condition, it goes in case 3. There is nothing in case 3, also there is no break. So default is executed. Please refer [switch statement in C](#) for details.

This article is contributed by **Punit, Smriti Satyanarayana, Akash Tiwari, Sagar Tripathy** . If you like GeeksforGeeks and would like to contribute, you can also write an article using [contribute.geeksforgeeks.org](https://contribute.geeksforgeeks.org) or mail your article to [contribute@geeksforgeeks.org](mailto:contribute@geeksforgeeks.org). See your article appearing on the GeeksforGeeks main page and help other Geeks.

Please write comments if you find anything incorrect, or you want to share more information about the topic discussed above.

### Recommended Posts:

[Output of C programs | Set 43](#)[Output of C programs | Set 38](#)[Output of C++ programs | Set 36](#)[Output of C programs | Set 42](#)[Output of C programs | Set 29](#)[Output of C++ programs | Set 37](#)[Output of C programs | Set 36](#)[Output of C++ programs | Set 35](#)[Output of C programs | Set 34](#)



See how your visitors are really using your website.

TRY IT FOR FREE

HIDE AD • AD VIA BUYSSELLADS

[Output of C++ Programs | Set 49](#)

[Output of C programs | Set 41](#)

[Output of C programs | Set 37](#)

[Output of C programs | Set 63](#)

**Improved By : AmarMane**

Article Tags : [Program Output](#) [CPP-Output](#)



Be the First to upvote.

3.3

To-do  Done

Based on 3 vote(s)

[Feedback/ Suggest Improvement](#)

[Notes](#)

[Improve Article](#)

Please write to us at [contribute@geeksforgeeks.org](mailto:contribute@geeksforgeeks.org) to report any issue with the above content.

Writing code in comment? Please use [ide.geeksforgeeks.org](https://ide.geeksforgeeks.org), generate link and share the link here.

[Load Comments](#)





See how your visitors are really using your website.

TRY IT FOR FREE

HIDE AD • AD VIA BUYSSELLADS

A computer science portal for geeks

5th Floor, A-118,  
Sector-136, Noida, Uttar Pradesh - 201305  
feedback@geeksforgeeks.org

**COMPANY**

- About Us
- Careers
- Privacy Policy
- Contact Us

**PRACTICE**

- Courses
- Company-wise
- Topic-wise
- How to begin?

**LEARN**

- Algorithms
- Data Structures
- Languages
- CS Subjects
- Video Tutorials

**CONTRIBUTE**

- Write an Article
- Write Interview Experience
- Internships
- Videos

@geeksforgeeks, Some rights reserved

