

C++ Programming

Operators Homework

Mostafa S. Ibrahim

Teaching, Training and Coaching since more than a decade!

Artificial Intelligence & Computer Vision Researcher

PhD from Simon Fraser University - Canada

Bachelor / Msc from Cairo University - Egypt

Ex-(Software Engineer / ICPC World Finalist)



Homework 1: Guess Program Output

```
4 int main() {  
5     int a = 0, b = 1;  
6  
7     cout<<a++<<"\n";  
8     cout<<++a<<"\n";  
9     a += 2*b+1;  
10    b = ++a * 2;  
11    cout<<a<<" "<<b<<"\n";  
12  
13    b = a;  
14    a = 12 + a / 3 / 2 - 2 * 2;  
15    cout<<a<<"\n";  
16  
17    a = b;  
18    a = ((12 + a) / 3 / 2 - 2) * 2;  
19    cout<<a<<"\n";  
20  
21    return 0;  
22 }  
23  
24
```

Homework 2: Guess Program Output

```
4 int main() {  
5  
6     int a = 1, b = 1, c;  
7  
8     cout<<(c = a+b, a = b, b = c,  
9           c = a+b, a = b, b = c,  
10          c = a+b, a = b, b = c,  
11          c = a+b, a = b, b = c) <<endl;  
12 }
```

Homework 3: Guess Program Output

```
int a = 210;

a /= 2;
cout<<a<<"\n";

cout<<(a /= 3)<<"\n";
cout<<(a /= 5)<<"\n";
cout<<(a /= 7)<<"\n";

cout<<(2+3) * (5-(-3)) / 5 / 8 <<"\n";

a = 10;
cout<<a++ + 10<<"\n";
cout<<++a + 10<<"\n";
cout<<a-- + 10<<"\n";
cout<<--a + 10<<"\n";

int b = 20;
cout<<a++ + ++b<<"\n"; // Don't code this way

cout<<a<<"\n";
++a+=10; // Don't code this way
cout<<a<<"\n";
```

“Acquire knowledge and impart it to the people.”

“Seek knowledge from the Cradle to the Grave.”