

Programming Fundamentals

Assignment # 3



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Question #1 : Find the Error of the following code. If no error then write output.

a :

```
#include <iostream>
using namespace std;
int main()
{
    int I, j;

    for (I = 1; I >= 7; I++)
        cout << I;

    cout << "end of program";
    return 7;
}
```

```
PS D:\c++ programs> cd "d:\c++ programs\Question-1\" ; if ($?) { g++ a.
a }
end of program
PS D:\c++ programs\Question-1> []
```

B :

```
#include <iostream>
using namespace std;
int main()
{
    int num1 = 11, num2 = 10;

    if (num1 < num2)
        cout << "num1 is the smallest";
    num1 = num2;
    else
        cout << "num2 is smallest";
    return 0;
}
```

```
b.cpp: In function 'int main()':
b.cpp:11:5: error: 'else' without a previous 'if'
      else
      ^
PS D:\c++ programs\Question-1> []
```

C :

```
#include <iostream>
using namespace std;
int main()
{
    int a = 0, b = 1;
    a = b++;
    cout << a << b;
    b = ++a;
    cout << a << b;
    return 0;
}
```

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PS D:\c++ programs\Question-1> 

D :

```
#include <iostream>
using namespace std;
int main(){
    cout<<"enter values";
    int a,b,res;
    cin>>a;cin>>b;
    a=20;b=10;
    a+b=res;
    cout<<"res ="<<res;
    return 0;
}
```

```
d.cpp: In function 'int main()':
d.cpp:8:9: error: lvalue required as left operand of assignment
      a+b=res;
      ^
PS D:\c++ programs\Question-1> []
```

Question #3 : Write a program that read height in inches and display the height in feet and inches.

```
#include <iostream>
using namespace std;
int main(){
    float inches,feet;
    cout<<"Enter height in inches";
    cin >>inches;
    feet=inches/12;
    cout<<"Your height in feet = "<<feet<<endl;
}
```

```
Enter height in inches 58
Your height in feet = 4.83333
PS D:\c++ programs>
```

Question #4 : Write a program that take two numbers form user. Find if the first number is multiple of second number.

```
#include <iostream>
using namespace std;
int main(){
    int num1,num2;
    cout<< "enter two numbers";
    cin>>num1>>num2;
    if(num1%num2== 0){
        cout<<"your number is multiple of second number";
    }
    else{
        cout<<"your number is not multiple of second number";
    }
    return 0;
}
```

```
enter two numbers 20 5
your number is multipal of second number
PS D:\c++ programs> █
```

Question #5 : Write a program that read 10 numbers from the user and display their sum , maximum a minimum number.

```
#include <iostream>
using namespace std;
int main()
{
    int num, sum = 0, max=0, min=9999;
    cout << "Enter 10 Number: ";
    for (int i = 0; i < 10; i++)
    {
        cin >> num;
        sum = sum + num;
        if(max<num) {
            max=num;
        }
        if(min>num) {
            min=num;
        }
    }

    cout <<"\nsum of numbers is\t" << sum;

    cout <<"\nmax of these number\t" << max;

    cout <<"\nmin of these number\t" << min;
    return 0;
}
```

```
Enter 10 Number: 44 66 37 458 25 3 2 5 33 44
```

```
sum of numbers is      717
```

```
max of these number    458
```

```
min of these number     2
```

```
PS D:\c++ programs>
```

Array Sorting Program

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

const int n = 10;

// Function that take input

void inputarray(int ar[])
{
    cout << "Enter " << n << " values of array";
    for (int i = 0; i < n; i++)
    {
        cin >> ar[i];
    }
}

// Function for sorting array
```

```
void sortArray(int ar[])
{
    int temp;
    for (int j = 1; j <= n; j++)
    {
        for (int i = 0; i < n; i++)
        {
            if (ar[i] > ar[i + 1])
            {
                temp = ar[i];
                ar[i] = ar[i + 1];
                ar[i + 1] = temp;
            }
        }
    }
}

// Function for output

void output(int ar[])
{
    cout << "Your array in assending order = ";
    for (int i = 0; i < n; i++)
    {
        cout << ar[i] << " ";
    }
}
```

```
// now main function
```

```
int main()
{
    int ar[n];
    inputarray(ar);
    sortArray(ar);
    output(ar);
}
```

```
PS D:\c++ programs> cd "d:\c++ programs\" ; if ($?) { g++ temp.cpp -o temp } ; if ($?) { .\temp }
Enter 10 values of array3 4 37 48 25 37 5 48 3 4 5
Your array in assending order = 3 3 4 4 5 25 37 37 48 48
PS D:\c++ programs>
```