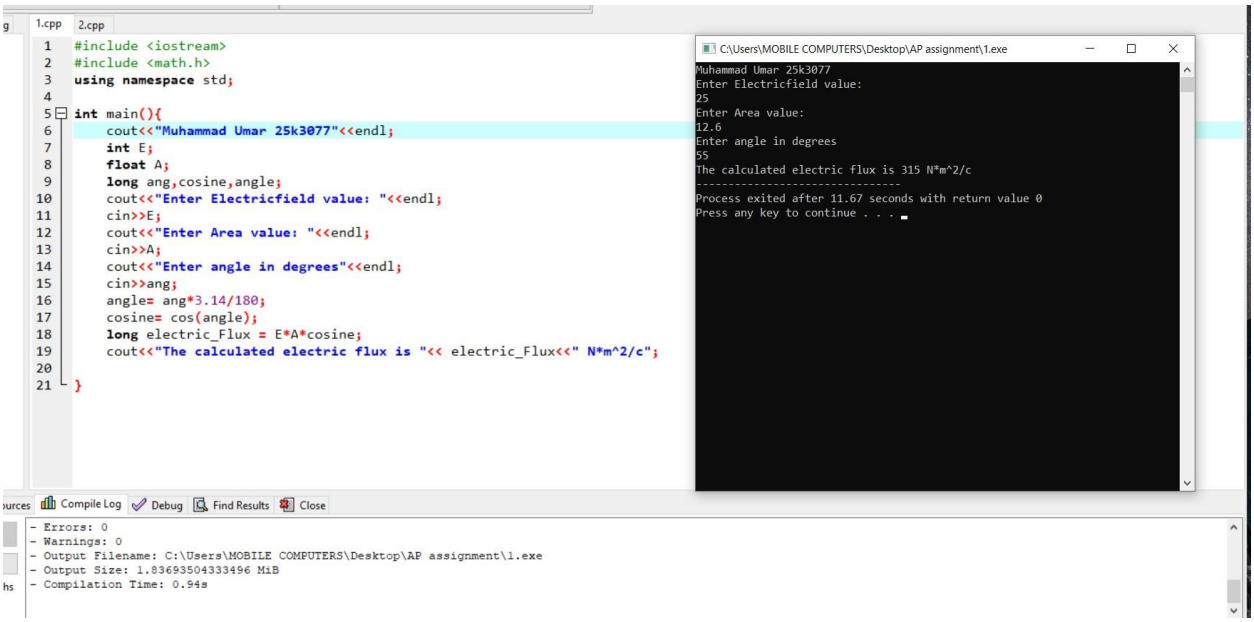
Muhammad Umar 25k3077

1.

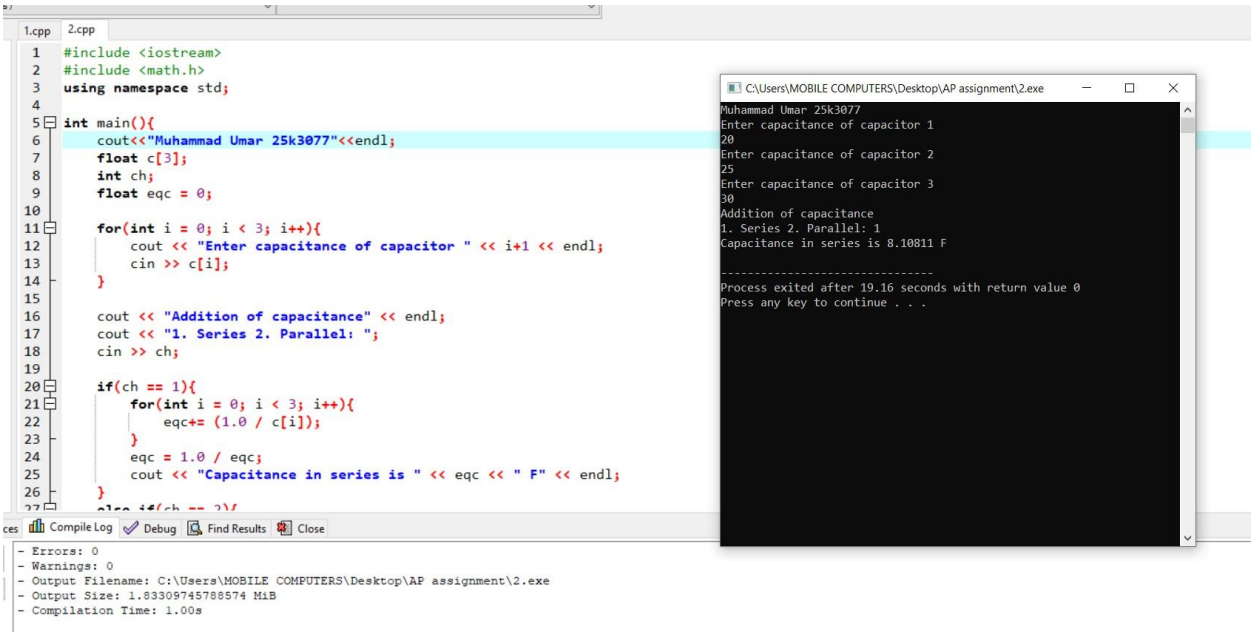


```cpp
#include <iostream>
#include <math.h>
using namespace std;

int main(){
    cout<<"Muhammad Umar 25k3077"<<endl;
    int E;
    float A;
    long ang,cosine,angle;
    cout<<"Enter Electricfield value: "<<endl;
    cin>>E;
    cout<<"Enter Area value: "<<endl;
    cin>>A;
    cout<<"Enter angle in degrees"<<endl;
    cin>>ang;
    angle= ang*3.14/180;
    cosine= cos(angle);
    long electric_Flux = E*A*cosine;
    cout<<"The calculated electric flux is "<< electric_Flux<<" N*m^2/c";

}
```

```
C:\Users\MOBILE COMPUTERS\Desktop\AP assignment\1.exe
Muhammad Umar 25k3077
Enter Electricfield value:
25
Enter Area value:
12.6
Enter angle in degrees
55
The calculated electric flux is 315 N*m^2/c
--------------------------------
Process exited after 11.67 seconds with return value 0
Press any key to continue . . .
```

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\MOBILE COMPUTERS\Desktop\AP assignment\1.exe
- Output Size: 1.83693504333496 MiB
- Compilation Time: 0.94s
```

2.



```cpp
#include <iostream>
#include <math.h>
using namespace std;

int main(){
    cout<<"Muhammad Umar 25k3077"<<endl;
    float c[3];
    int ch;
    float eqc = 0;

    for(int i = 0; i < 3; i++){
        cout << "Enter capacitance of capacitor " << i+1 << endl;
        cin >> c[i];
    }

    cout << "Addition of capacitance" << endl;
    cout << "1. Series 2. Parallel: ";
    cin >> ch;

    if(ch == 1){
        for(int i = 0; i < 3; i++){
            eqc+= (1.0 / c[i]);
        }
        eqc = 1.0 / eqc;
        cout << "Capacitance in series is " << eqc << " F" << endl;
    }
```

```
C:\Users\MOBILE COMPUTERS\Desktop\AP assignment\2.exe
Muhammad Umar 25k3077
Enter capacitance of capacitor 1
20
Enter capacitance of capacitor 2
25
Enter capacitance of capacitor 3
30
Addition of capacitance
1. Series 2. Parallel: 1
Capacitance in series is 8.10811 F

--------------------------------
Process exited after 19.16 seconds with return value 0
Press any key to continue . . .
```

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\MOBILE COMPUTERS\Desktop\AP assignment\2.exe
- Output Size: 1.83309745788574 MiB
- Compilation Time: 1.00s
```