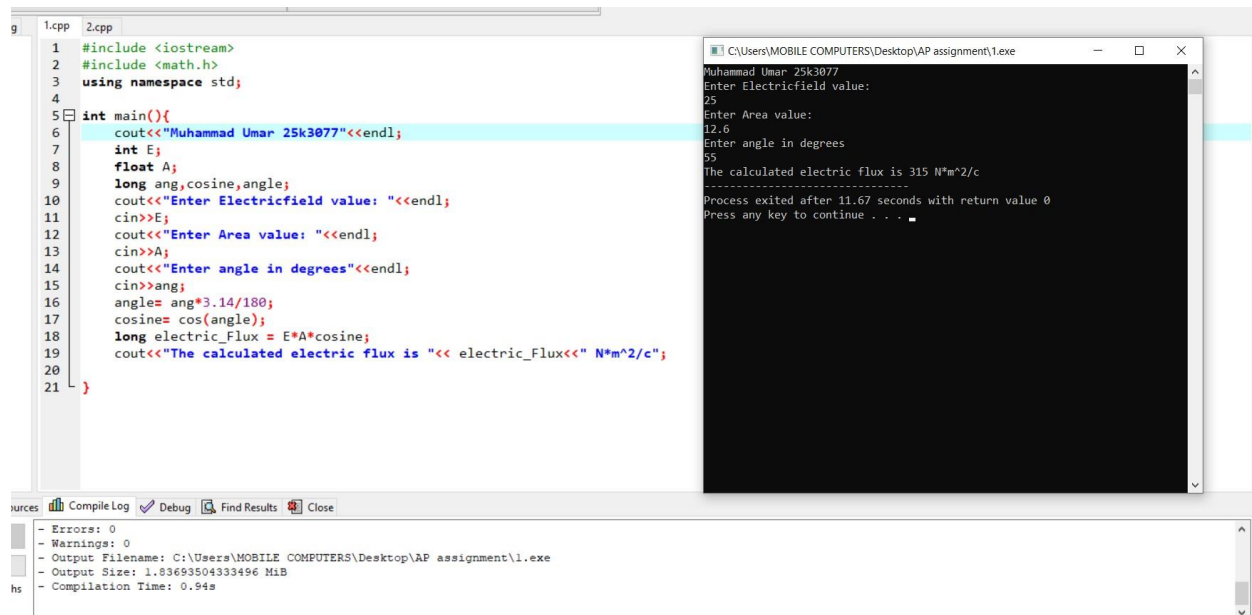


# Muhammad Umar 25k3077

1.



The screenshot shows a C++ IDE with two windows. The left window displays the source code for '1.cpp', and the right window shows the execution output for '1.exe'.

```
1.cpp
1 #include <iostream>
2 #include <math.h>
3 using namespace std;
4
5 int main(){
6     cout<<"Muhammad Umar 25k3077"<<endl;
7     int E;
8     float A;
9     long ang, cosine, angle;
10    cout<<"Enter Electricfield value: "<<endl;
11    cin>>E;
12    cout<<"Enter Area value: "<<endl;
13    cin>>A;
14    cout<<"Enter angle in degrees"<<endl;
15    cin>>ang;
16    angle= ang*3.14/180;
17    cosine= cos(angle);
18    long electric_Flux = E*A*cosine;
19    cout<<"The calculated electric flux is "<< electric_Flux<<" N*m^2/c";
20
21 }
```

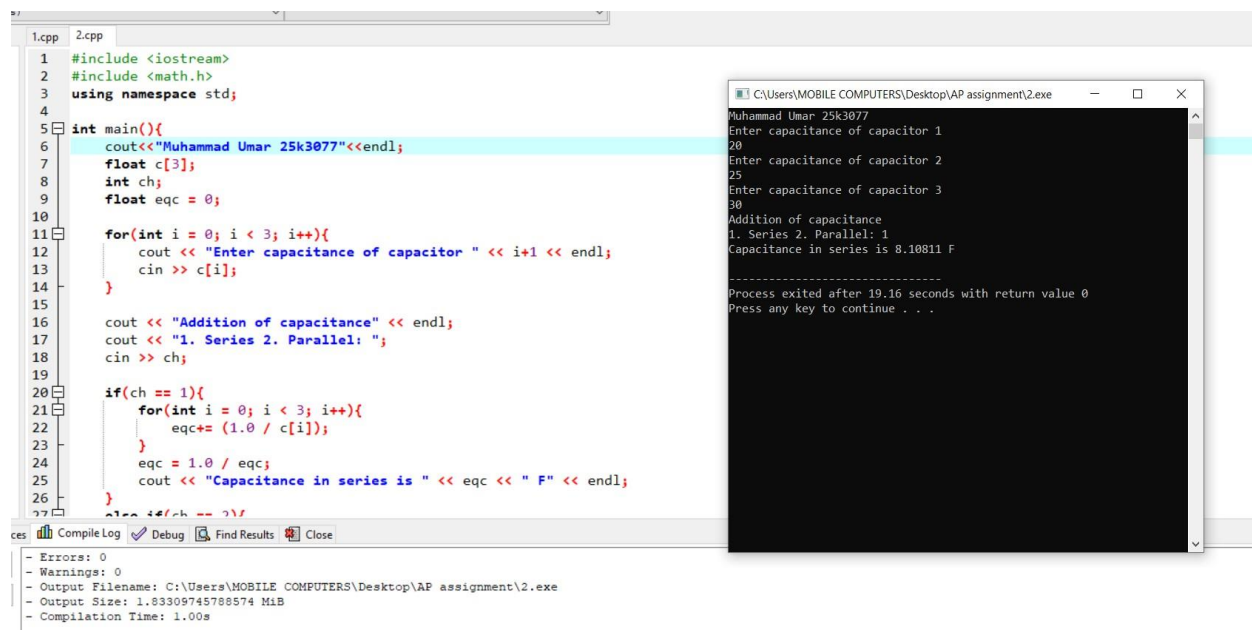
Execution Output (1.exe):

```
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 . . .
```

Compile Log:

```
- 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.



The screenshot shows a C++ IDE with two windows. The left window displays the source code for '2.cpp', and the right window shows the execution output for '2.exe'.

```
2.cpp
1 #include <iostream>
2 #include <math.h>
3 using namespace std;
4
5 int main(){
6     cout<<"Muhammad Umar 25k3077"<<endl;
7     float c[3];
8     int ch;
9     float eqc = 0;
10
11    for(int i = 0; i < 3; i++){
12        cout << "Enter capacitance of capacitor " << i+1 << endl;
13        cin >> c[i];
14    }
15
16    cout << "Addition of capacitance" << endl;
17    cout << "1. Series 2. Parallel: ";
18    cin >> ch;
19
20    if(ch == 1){
21        for(int i = 0; i < 3; i++){
22            eqc+= (1.0 / c[i]);
23        }
24        eqc = 1.0 / eqc;
25        cout << "Capacitance in series is " << eqc << " F" << endl;
26    }
27    else if(ch == 2){
28
29    }
```

Execution Output (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 . . .
```

Compile Log:

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