

**Department of Artificial Intelligence and Multimedia Gaming
Fundamentals of Programming**

(Fall-2025)

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Section: D

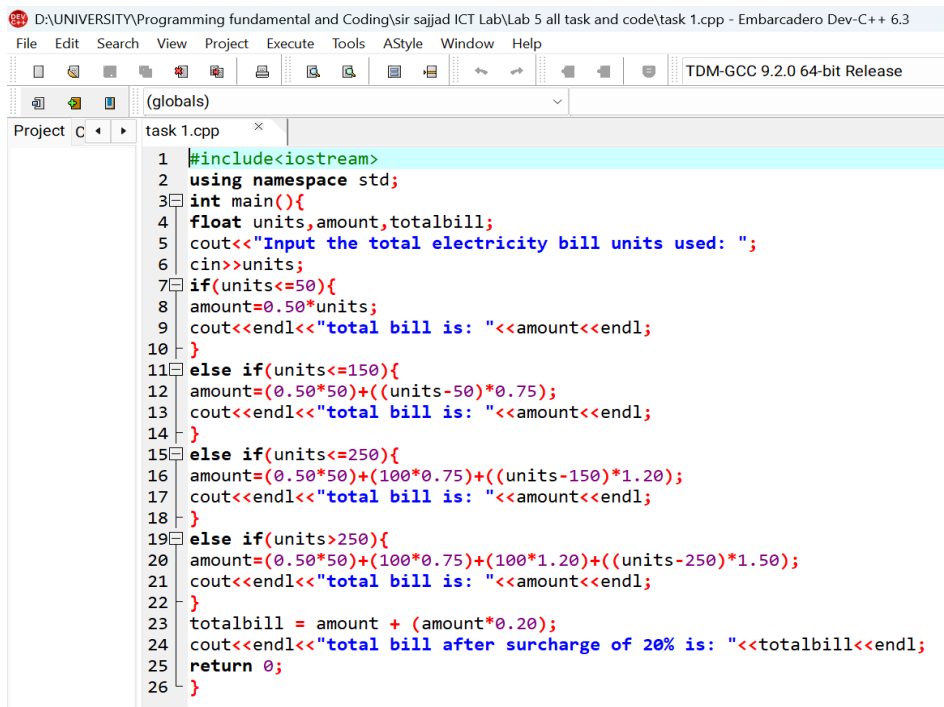
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LAB No. 05

LECTURER: SAJJAD ALI RAJPER

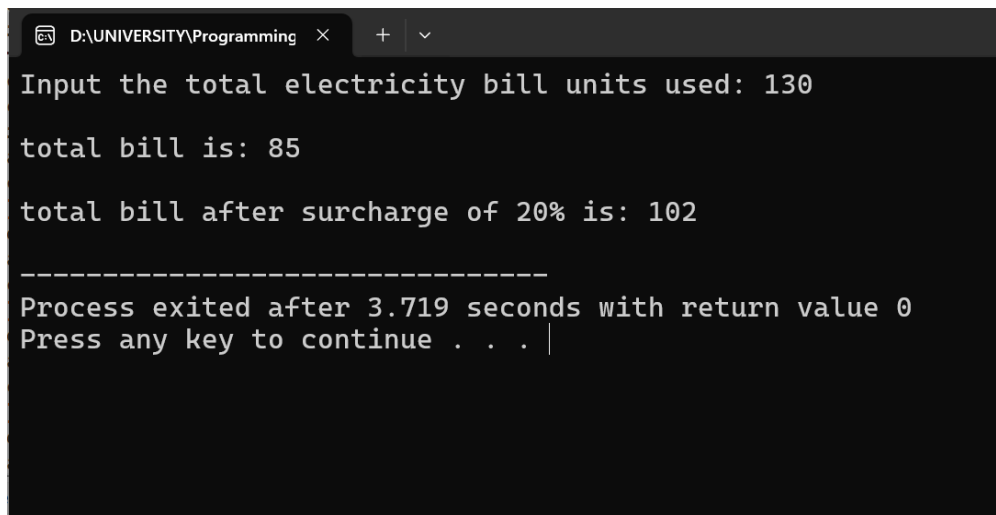
Task 1:

Code:



```
1 #include<iostream>
2 using namespace std;
3 int main(){
4     float units,amount,totalbill;
5     cout<<"Input the total electricity bill units used: ";
6     cin>>units;
7     if(units<=50){
8         amount=0.50*units;
9         cout<<endl<<"total bill is: "<<amount<<endl;
10    }
11    else if(units<=150){
12        amount=(0.50*50)+((units-50)*0.75);
13        cout<<endl<<"total bill is: "<<amount<<endl;
14    }
15    else if(units<=250){
16        amount=(0.50*50)+(100*0.75)+((units-150)*1.20);
17        cout<<endl<<"total bill is: "<<amount<<endl;
18    }
19    else if(units>250){
20        amount=(0.50*50)+(100*0.75)+(100*1.20)+((units-250)*1.50);
21        cout<<endl<<"total bill is: "<<amount<<endl;
22    }
23    totalbill = amount + (amount*0.20);
24    cout<<endl<<"total bill after surcharge of 20% is: "<<totalbill<<endl;
25    return 0;
26 }
```

Output:



```
D:\UNIVERSITY\Programming >
Input the total electricity bill units used: 130

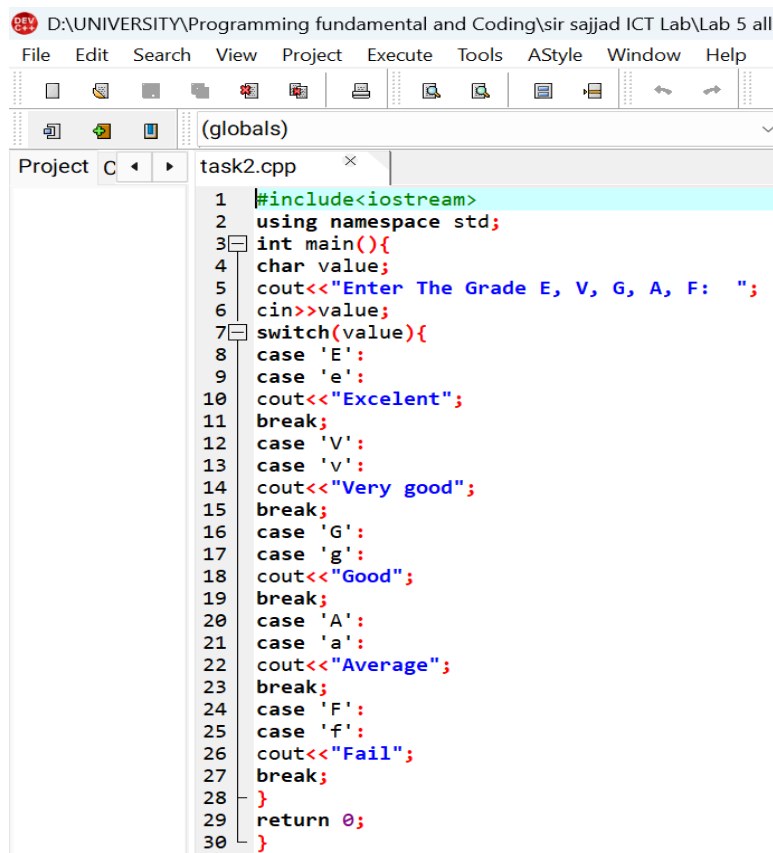
total bill is: 85

total bill after surcharge of 20% is: 102

-----
Process exited after 3.719 seconds with return value 0
Press any key to continue . . .
```

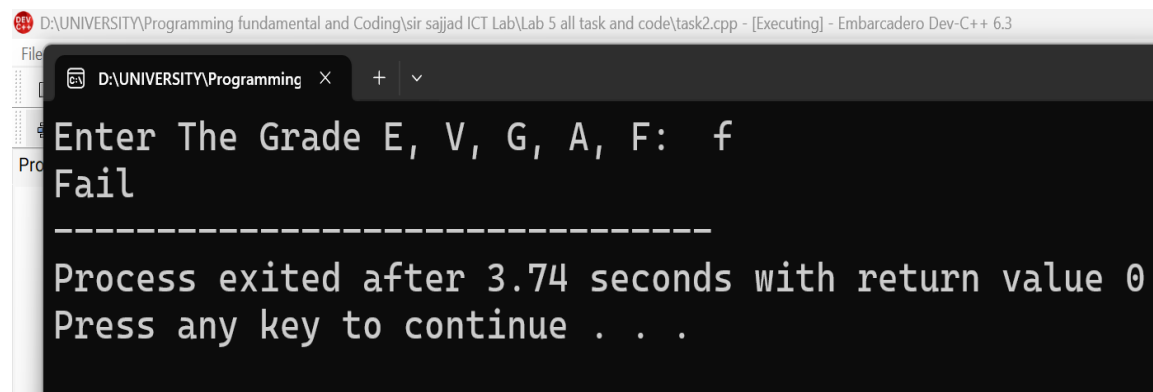
Task 2:

Code:



```
1 #include<iostream>
2 using namespace std;
3 int main(){
4     char value;
5     cout<<"Enter The Grade E, V, G, A, F: ";
6     cin>>value;
7     switch(value){
8     case 'E':
9     case 'e':
10    cout<<"Excelent";
11    break;
12    case 'V':
13    case 'v':
14    cout<<"Very good";
15    break;
16    case 'G':
17    case 'g':
18    cout<<"Good";
19    break;
20    case 'A':
21    case 'a':
22    cout<<"Average";
23    break;
24    case 'F':
25    case 'f':
26    cout<<"Fail";
27    break;
28    }
29    return 0;
30 }
```

Output:



```
Enter The Grade E, V, G, A, F: f
Fail
-----
Process exited after 3.74 seconds with return value 0
Press any key to continue . . .
```

Task 3:

Code:

```
D:\UNIVERSITY\Programming fundamental and Coding\sir sajjad ICT Lab\Lab 5 all task and co
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project C task3.cpp
1 #include<iostream>
2 using namespace std;
3 int main(){
4     int value;
5     cout<<"Enter any digit from (0-9): ";
6     cin>>value;
7     switch(value){
8     case 0:
9         cout<<"\nYou choose 0";
10        break;
11
12     case 1:
13         cout<<"\nYou choose 1";
14         break;
15
16     case 2:
17         cout<<"\nYou choose 2";
18         break;
19
20     case 3:
21         cout<<"\nYou choose 3";
22         break;
23
24     case 4:
25         cout<<"\nYou choose 4";
26         break;
27
```

```
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File Edit Search View Project Execute Tools AStyle Window
(globals)
Project C task3.cpp
28     case 5:
29         cout<<"\nYou choose 5";
30         break;
31
32     case 6:
33         cout<<"\nYou choose 6";
34         break;
35
36     case 7:
37         cout<<"\nYou choose 7";
38         break;
39
40     case 8:
41         cout<<"\nYou choose 8";
42         break;
43
44     case 9:
45         cout<<"\nYou choose 9";
46         break;
47
48     default:
49         cout<<"\nInvalid digit!";
50     }
51
```

Output:

```
D:\UNIVERSITY\Programming fundamental and Coding\sir sajjad ICT Lab\Lab 5 all task and code\task3.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
D:\UNIVERSITY\Programming
Enter any digit from (0-9): 7
You choose 7
-----
Process exited after 4.378 seconds with return value 0
Press any key to continue . . . |
```