Practical 03 – 22001212

01)

```cpp
1     #include <iostream>
2
3     using namespace std;
4
5     int main()
6     {
7         //Question 01
8         int num;
9         cout<<"\nEnter the value : ";
10        cin>>num;
11        cout<<"\nThe absolute value is :";
12        if(num<0){
13            cout<<0-num;
14        }
15        else{
16            cout<<num-0;
17        }
18        cout<<"\n";
19
```

```
"C:\Users\User\Desktop\UCSC\1st Year Sem-02\SCS 1209 - Object Oriente

Enter the value : -100

The absolute value is :100
```

02)

```cpp
20        //Question 02
21        int n;
22        cout<<"\nEnter the number : ";
23        cin>>n;
24        cout<<n<<" is ";
25        if(n%2==0){
26            cout<<"even";
27        }
28        else{
29            cout<<"odd";
30        }
31        cout<<"\n";
32
```

```
Enter the number : 86
86 is even
```

```
Enter the number : 75
75 is odd
```

03)

```
33          //Question 03
34          int arr[3],largest;
35          cout<<"\nEnter three numbers : ";
36          for(int i=0;i<3;i++){
37              cin>>arr[i];
38          }
39          cout<<"\nThe numbers are : ";
40          for(int i=0;i<3;i++){
41              cout<<arr[i]<<",";
42          }
43          largest=arr[0];
44          for(int i=0;i<3;i++){
45              if(arr[i]>=largest){
46                  largest=arr[i];
47              }
48          }
49          cout<<"\nThe largest number is : "<<largest;
50          cout<<"\n";
```

```
Enter three numbers : 65
12
56

The numbers are : 65,12,56,
The largest number is : 65
```

03-a)

```
53          int x,y,z,mid;
54          cout<<"\nEnter value for x : ";
55          cin>>x;
56          cout<<"\nEnter value for y : ";
57          cin>>y;
58          cout<<"\nEnter value for z : ";
59          cin>>z;
60
61          if(x<y && y<z || z<y && y<x){
62              mid=y;
63          }
64          else if(y<z && z<x || x<z && z<y){
65              mid=z;
66          }
67          if(y<x && x<z || z<x && x<y){
68              mid=x;
69          }
70          cout<<"\nThe middle number is : "<<mid;
71          cout<<"\n";
```

```
Enter value for x : 12

Enter value for y : 96

Enter value for z : 56

The middle number is : 56
```

03-b)

```
73      //Question 03 - b
74      mid=(x < y) ? ((y < z) ? y : ((x < z) ? z : x)) : ((x < z) ? x : ((y < z) ? z : y));
75      cout<<"\nThe middle number is : "<<mid;
76      cout<<"\n";
77
```

```
The numbers are : 65,12,56,
The largest number is : 65

Enter value for x : 12

Enter value for y : 96

Enter value for z : 56

The middle number is : 56

The middle number is : 56
```

04)

```
78          //Question 04
79          int temperature;
80          cout<<"\nEnter the temperature: ";
81          cin>>temperature;
82          if(temperature<50){
83              if(temperature<30){
84                  cout<<"\nWear the down jacket 1";
85              }
86              else{
87                  cout<<"\nNo need to worry about the jacket";
88              }
89          }
90          else{
91              cout<<"\nYou have entered an invalid temperature.";
92          }
93
94          return 0;
95      }
```

```
Enter the temperature: 35

No need to worry about the jacket
Process returned 0 (0x0)    execution time : 798.204 s
Press any key to continue.
```

05-a)

```cpp
1       #include <iostream>
2
3       using namespace std;
4
5       int main()
6       {
7           //Question 05 - a
8           int sub1,sub2,sub3,avg;
9           string remark;
10          cout<<"\nEnter the marks for Subject 1 : ";
11          cin>>sub1;
12          cout<<"\nEnter the marks for Subject 2 : ";
13          cin>>sub2;
14          cout<<"\nEnter the marks for Subject 3 : ";
15          cin>>sub3;
16          avg=(sub1+sub2+sub3)/3;
17          if(avg>=70){
18              cout<<"\nVery good.";
19          }
20          else if(70>avg>=55){
21              cout<<"\nGood.";
22          }
23          else if(55>avg>=40){
24              cout<<"\nPass.";
25          }
26          else if(40>avg){
27              cout<<"\nFail.";
28          }
29          else if(avg<0){
30              cout<<"\nInvalid Mark.";
31          }
32          cout<<"\n";
```

```
"C:\Users\User\Desktop\UCSC\1st Year Sem-02\SCS 1209

Enter the marks for Subject 1 : 60

Enter the marks for Subject 2 : 75

Enter the marks for Subject 3 : 85

Very good.
```

05-b)

```
33        //Question 05 - b
34
35        avg>=70 ? remark="Very good":(70>avg>=55 ? remark="Good":
36                              (55>avg>=40 ? remark="Pass":(40>avg>=0 ? remark="Fail": remark="Invalid Mark")));
37        cout<<remark;
38        cout<<"\n";
39
```

```
"C:\Users\User\Desktop\UCSC\1st Year Sem-02\SCS 1209 - O

Enter the marks for Subject 1 : 60

Enter the marks for Subject 2 : 75

Enter the marks for Subject 3 : 85

Very good.
Very good
```

06.

```
40        //Question 06
41        int c,f,ch;
42        cout<<"\nEnter your choice : 1.Convert Centigrade into Fahrenheit  2.Convert Fahrenheit into Centigrade 3.Exit  ";
43        cin>>ch;
44        while(ch!=3){
45            if(ch==1){
46            cout<<"\nEnter the temperature in Centigrade : ";
47            cin>>c;
48            cout<<"Temperature in Fahrenheit : "<<c*(9/5)+32;
49            }
50            else if(ch==2){
51                cout<<"\nEnter the temperature in Fahrenheit : ";
52                cin>>f;
53                cout<<"Temperature in Centigrade : "<<(f-32)*5/9;
54            }
55            cout<<"\nEnter your choice : 1.Convert Centigrade into Fahrenheit  2.Convert Fahrenheit into Centigrade 3.Exit  ";
56            cin>>ch;
57        }
58        cout<<"\n";
59        return 0;
```

```
Enter your choice : 1.Convert Centigrade into Fahrenheit  2.Convert Fahrenheit into Centigrade 3.Exit  1

Enter the temperature in Centigrade : 0
Temperature in Fahrenheit : 32
Enter your choice : 1.Convert Centigrade into Fahrenheit  2.Convert Fahrenheit into Centigrade 3.Exit  2

Enter the temperature in Fahrenheit : 32
Temperature in Centigrade : 0
Enter your choice : 1.Convert Centigrade into Fahrenheit  2.Convert Fahrenheit into Centigrade 3.Exit  3


Process returned 0 (0x0)   execution time : 47.853 s
Press any key to continue.
```