Lab manual 2

Submitted to: M. Affan

Name: Muhammad Bin Ahmad

ME-15(A)

Roll No: 480779

```cpp
#include <iostream>

using namespace std;

int main ()        {

        int age;

        cout<<"Input the age of the person."<<endl;

        cin>> age;

        if (age>0 && age<110)   {

                if (age>=18) {

                        cout<<"Person is eligible to vote."<<endl;

                }

                else {

                        cout<<"Person is not eligible to vote."<<endl;

                }


        }

        else     {

        cout<<"Invalid input.";

                }

                }

         end of task 1
```

```
Input the age of the person.
5
Person is not eligible to vote.

----------------------------------
Process exited after 3.459 seconds with return value 0
Press any key to continue . . . _
```

```
Input the age of the person.
57
Person is eligible to vote.

----------------------------------
Process exited after 3.472 seconds with return value 0
Press any key to continue . . .
```

```
Input the age of the person.
0
Invalid input.
----------------------------------
Process exited after 10.18 seconds with return value 0
Press any key to continue . . . _
```

```cpp
#include <iostream>

using namespace std;

int main ()      {

int num;

cout<<"Input any number."<<endl;

cin>> num;

if (num>=10 && num<=50)      {

        cout<<"The number falls within the range.";

}

else    {
```

cout<<"Number is not within the range.";

    }

    }

end of task 2

```
Input any number.
34
The number falls within the range.
---------------------------------
Process exited after 4.632 seconds with return value 0
Press any key to continue . . .
```

```
Input any number.
-45
Number is not within the range.
---------------------------------
Process exited after 4.734 seconds with return value 0
Press any key to continue . . . ▪
```

```cpp
#include <iostream>

using namespace std;

int main ()      {

int a,b ;

cout<<"Enter values for two integers a and b respectively."<<endl;

cin>>a>>b;

if (a==b) {

        cout<<"Both values are equal which is "<<a<<endl;

}

else if (a>b) {

        cout<<"The larger value is of a which is "<<a<<endl;
```

```
        }

        else if (a<b) {

                cout<<"The larger value is of b which is "<<b<<endl;

        }

    }
```

End of task 3

```
Enter values for two integers a and b respectively.
6
5
The larger value is of a which is 6

-------------------------------
Process exited after 2.012 seconds with return value 0
Press any key to continue . . . _
```

```
Enter values for two integers a and b respectively.
3
7
The larger value is of b which is 7

-------------------------------
Process exited after 1.295 seconds with return value 0
Press any key to continue . . . _
```

```
Enter values for two integers a and b respectively.
7
7
Both values are equal which is 7

-------------------------------
Process exited after 0.7705 seconds with return value 0
Press any key to continue . . .
```

```cpp
#include <iostream>

using namespace std;

int main ()        {
```

```cpp
float score1,score2,score3,sum,average;

int pass_grade=40;

cout<<"Enter the scores for the 3 exams."<<endl;

cin>>score1>>score2>>score3;

if (score1>=0 && score1<=100 && score2>=0 && score2<=100 && score3>=0 && score3<=100)
{

    sum = score1 + score2 + score3;

    average = sum/3;

    if (average>= pass_grade)        {

            cout<<"Pass.";

    }
    else {

            cout<<"Fail.";

    }
}
else {

        cout<<"Invalid input.";

}
}
 end of task 4
```

```
Enter the scores for the 3 exams.
45
65
32
Pass.
-------------------------------
Process exited after 6.595 seconds with return value 0
Press any key to continue . . .
```

```
Enter the scores for the 3 exams.
10
10
10
Fail.
-------------------------------
Process exited after 4.292 seconds with return value 0
Press any key to continue . . .
```

```
Enter the scores for the 3 exams.
139
231
125
Invalid input.
-------------------------------
Process exited after 5.851 seconds with return value 0
Press any key to continue . . .
```

```
Enter the scores for the 3 exams.
-44
54
32
Invalid input.
-------------------------------
Process exited after 4.565 seconds with return value 0
Press any key to continue . . . _
```