

Sensor Monitor v1.5

Our task is to create a simple program that would keep track of temperature readings in a biology lab. As the scientist takes readings, he/she would record those readings using this program (feature #1).

The program would keep track of the lowest, highest and average temperature entered and report when requested (feature #2).

Feature #1: Submit Temperature Reading

We allow user to enter a temperature. The temperature must within the range of -200 to 200, inclusive. If user enters a temperature outside this range, warn the user and ignore the entered value.

If the entered value is valid and happens to be the highest temperature that has been entered to the system, let the user know.

Similarly, if the entered value is valid and happens to be the lowest temperature that has been entered to the system, let the user know.

Feature #2: Report the lowest, highest and the average temperature submitted to the program.

Feature #0: Exit

Exits the program.

Refer to screenshot displayed on the right for more information..

Avoid Penalties!

- 40 points penalty if your code is not properly indented
- 40 points penalty if your code is not commented.
- 100 points penalty if your code does not compile
- You have 2 hours to write this program.

There is -10 points penalty for every minute it is submitted late on blackboard.

```
Welcome to Sensor Monitor 1.5
1- Submit Temperature Reading
2- Temperature Report
0- Exit
What do you want to do? 1
What is the temperature? 60
This is the lowest temperature recorded yet.
This is the highest temperature recorded yet.
```

```
Welcome to Sensor Monitor 1.5
1- Submit Temperature Reading
2- Temperature Report
0- Exit
What do you want to do? 1
What is the temperature? 62
This is the highest temperature recorded yet.
```

```
Welcome to Sensor Monitor 1.5
1- Submit Temperature Reading
2- Temperature Report
0- Exit
What do you want to do? 1
What is the temperature? 205
Temp. out of range [-200 <= temp <= 200]
```

```
Welcome to Sensor Monitor 1.5
1- Submit Temperature Reading
2- Temperature Report
0- Exit
What do you want to do? 1
What is the temperature? -305
Temp. out of range [-200 <= temp <= 200]
```

```
Welcome to Sensor Monitor 1.5
1- Submit Temperature Reading
2- Temperature Report
0- Exit
What do you want to do? 1
What is the temperature? 50
This is the lowest temperature recorded yet.
```

```
Welcome to Sensor Monitor 1.5
1- Submit Temperature Reading
2- Temperature Report
0- Exit
What do you want to do? 1
What is the temperature? 61
```

```
Welcome to Sensor Monitor 1.5
1- Submit Temperature Reading
2- Temperature Report
0- Exit
What do you want to do? 2
The lowest temp is 50
The highest temp is 62
The average temp is 58.25
```

```
Welcome to Sensor Monitor 1.5
1- Submit Temperature Reading
2- Temperature Report
0- Exit
What do you want to do? _
```