CST 370 – Fall (B) 2021
Homework 0
Due: 10/26/2021 (Tuesday) (11:55 PM)
(This is for an exercise. There's no actual credit for the homework 0.)

How to turn in: Write **two programs** in **either C++ or Java** and submit them on Canvas before the due.

- You **can submit** your programs **multiple times** before the due. However, the **last submission will be used for grading**.
- You have to **submit two programs together**, especially at your last submission. **If you submit only one program** at the last submission, **we are able to see only that program when we grade** your homework.
- Due time is 11:55(PM). Since there could be a long delay between your computer and Canvas, you should submit it early.
- When you submit your homework program, don't forget to include "Title", "Abstract", "ID", "Name", and "Date".

1. Write a C++ (or Java) program called **hw0_1.cpp (**or **hw0_1.java)** that reads two integer numbers from a user and displays the sum and difference of the two numbers on the screen.

Sample Run 0: This is a sample run of the program. The **bold font** is used to indicate the **user's input**. Note that your program has to **display the output exactly like the sample run**. Also, the **difference of two numbers always zero or positive number**.

```
9 -10
SUM:-1
DIFF:19
```

Sample Run 1: This is another sample run.

```
12 5
SUM:17
DIFF:7
```

Sample Run 2: This is the last sample run.

```
-7 -7
SUM:-14
DIFF:0
```

2. Write a C++ (or Java) program called **hw0_2.cpp (**or **hw0_2.java)** that reads five integer numbers from a user and displays the min, max, and median values on the screen.

Sample Run 0: This is a sample run of the program.

```
1 3 5 4 2
MIN:1
MAX:5
MEDIAN:3
```

Sample Run 1: This is another sample run.

```
-2 -300 75 24 2
MIN:-300
MAX:75
MEDIAN:2
```

Sample Run 2: This is the last sample run.

```
5 2 5 3 2
MIN:2
MAX:5
MEDIAN:3
```

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Programming Steps for Homework Submission

The following is the **instructor's recommendation for the homework programming**.

Step 1: Read the homework description carefully

Before starting the programming, you should identify what the instructor wants. To get the requirement of the programming, read the homework description very carefully before starting the development.

Step 2: Develop the program at AWS Educate Cloud9

After understanding the requirement clearly, go to **https://www.awseducate.com/signin** and start development.

Step 3: Test your program

While developing your program, test it using the sample runs provided in the homework description. You also need to run your own input data to make sure that your program works well for other input data which are not presented in the homework description.

Step 4: Run the automatic script
Run the automatic script of test cases provided by the instructor because the instructor and TA will use the script for the grading purpose. For details, read the power point file named "AWS_Educate_for_Homework.ppt" on Canvas.

Step 5: Submit your programs on Canvas
When you finish your development and testing, submit your source code on Canvas. In the source code, you have to include the head comment such as "Title", "Abstract", "ID", "Name", and "Date".
The following is a sample C++ program with the head comment.

```
/*
 * Title: hw0_1.cpp
 * Abstract: This program reads two integer numbers from a user and
 *           displays the sum and difference of them.
 * Author: Bob Otter
 * ID: 8899
 * Date: 10/24/2021
 */

#include <iostream>

using namespace std;

int main()
{
    // Your actual code will be here...

    return 0;
}
```