<div align="center">

Deadline : 28th March, 2021

Time : 11:59 PM
Marks: 60 Points

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Read the instructions carefully.

1   General Instructions

- This work is an **individual** work and should satisfy expectation of originality.

- Any form of plagiarism will not be tolerated.

- You must submit a single **.zip file** for this assignment on Lea under
  420-101-VA Assignment-02.

- Place all your Java programs (.java files) directly in a folder with a name
  Lastname_Firstname_StudentID (e.g.,Sheth_Jaina_2115533).
  Compress (zip) the folder and submit a **.zip** file only. There shouldn't be any **package**
  folder or **src** folder inside the zipped folder.

- You must not submit files with extensions such as a **.rar**, **.tz**, **.7z**, **.java**, **.txt**, etc.

- If you submit a file other than **.zip** file, your submission will not be considered and you
  will be graded a straight 0. Also, if you submit multiple files, only the last submitted
  work will be considered.

2   Grading

You will be graded out of 60 points according to the following distribution:

- [10 points] 5 points for each of the tasks 1 and 2.

- [20 points] 10 points for each of the tasks 3 and 4.

- [30 points] 15 points for each of the tasks 5 and 6.

3 Tasks

Write a Java program for each of the following. Design a generalized solution which can work for any valid value of variables.

1. Accept a floating point number as user input. Display the **whole number portion of the floating point number** on the screen.

   - For example, if we consider the number 154.62, the whole number portion is 154. If we consider the number 0.0623, the whole number portion is 0.
   - These are just examples. Your program should work for any valid floating point value, not just these two.

2. Accept a floating point value for temperature in Fahrenheit scale. **Convert this value of temperature from Fahrenheit to Celsius** degree and display the temperature in Celsius on the screen.

   - The formula for this conversion:
   $$C = \frac{5}{9} * (F - 32)$$
   where F is value for temperature in Fahrenheit scale.

   - For example, if we consider the value for temperature in Fahrenheit scale to be 45.5, then the equivalent Celsius temperature value would be 7.5 using the given formula.
   - This is just an example. Your program should work for any valid floating point value for temperature in Fahrenheit scale, not just the given one.

3. Accept marks for a student for three different subjects out of 100 (as whole numbers). Calculate his **total marks** and **average of three subjects**. Display both of them on the screen.

4. Accept a number as user input. Check **if the number is odd or even** using the **ternary operator**. Display the result on the screen as either **"The given number is odd."** or **"The given number is even"**.

5. Accept a 3-digit whole number as user input and display the number on the screen. **Reverse this 3-digit number using operators** and display reversed number on the screen.

   - For example, if we consider the number 178, the reversed number will be 871.
   - This is just an example. Your program should work for any valid 3-digit whole number, not just the given one.

6. Accept floating point values for the following variables as user input:

- **mealCost**
- **tipPercent**

First, **calculate the value for the variable totalTip** using the accepted values. Then, **calculate the value for the variable totalBill**. Display all four values on the screen.

- For example, if we consider the value of the variable **mealCost** to be 40.00 and the value of the variable **tipPercent** to be 15.50; the **totalTip** will be 6.20 and the **totalBill** will be 46.20 after the calculations.
- This is just an example. Your program should work for any valid floating point values for **mealCost** and **tipPercent**, not just the given one.