Advance Programming (Object Oriented Programming Lab)
Assignment-1
Due Date -1 Week

1. Write an application that asks the user to enter two integers, obtains them from the user and displays the larger number followed by the words "is larger". If the numbers are equal, print the message "These numbers are equal".

2. Write an application that reads two integers, determines whether the first is a multiple of the second and prints the result.

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3. Create a BMI calculator that reads the user's weight in pounds and height in inches (or, if you prefer, the user's weight in kilograms and height in meters), then calculates and displays the user's body mass index

$$BMI = \frac{weightInKilograms}{heightInMeters \times heightInMeters}$$

4. Create an application that calculates your daily driving cost, so that you can estimate how much money could be saved by car pooling, which also has other advantages such as reducing carbon emissions and reducing traffic congestion. The application should input the following information and display the user's cost per day of driving to work:
   a) Total miles driven per day.
   b) Cost per gallon of gasoline.
   c) Average miles per gallon.
   d) Parking fees per day.
   e) Tolls per day.

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5. Write a program to print the following pattern

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   * * * *
   * * *
   * *
   *
   ```

6. Write a program to print the following pattern

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*
* *
* * *
* * * *
* * * * *
* * * *
* * *
* *
*
```