

# NUMBER ANALYZER - Decision Maker

**Objectives:** User Input, Conditionals

**NOTE:** Points will still be awarded for items that are written correctly but don't actually work due to other things being broken. There is a total of 10 points available for this lab.

**Task:** Use conditional statements to automate the decision-making process.

## What will the application do?

- **1 Point:** The application prompts the user to enter an integer between 1 and 100.
- Display the associated result based on the integer range entered.

## Build Specifications:

1. **1 Point:** Use if/else statements to take different actions depending on user input.
2. Given an integer entered by a user, perform the following conditional actions:
  - a. **1 Point:** If the integer entered is odd, print the number entered and "Odd."
  - b. **1 Point:** If the integer entered is even and in the inclusive range of 2 to 25, print "Even and less than 25."
  - c. **1 Point:** If the integer entered is even and in the inclusive range of 26 to 60, print "Even."
  - d. **1 Point:** If the integer entered is even and greater than 60, print the number entered and "Even."
  - e. **1 Point:** If the integer entered is odd and greater than 60, print the number entered and "Odd."

## Additional Requirements:

- **1 Point:** For answering the Lab Summary when submitting to the LMS
- **-2 Points:** if there are any syntax errors or if the program does not run (for example, in a Main method).

## Hints:

- Remember what "inclusive" and "exclusive" mean when referring to ranges of numbers. The range of numbers from 1 inclusive to 10 exclusive means the numbers 1, 2, 3, 4, 5, 6, 7, 8, 9 (but not 10; it's excluded).

## Extra Challenges (2 Points Maximum):

- **1 Point:** Include a set of parameters so that the program ends officially.
- **1 Point:** Ask for user information (ex. name) at the beginning of the application, and use it to refer to the user throughout the application.
- **1 Point:** Add validation to guarantee that a user enters a positive integer between 1 and 100.



**Console Preview:**

**Enter a number between 1 and 100:** {user input here, for example: 3}

**Output:** {output here, 3 and Odd }

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Continue? (y/n): {user input here, for example: Y}

**Enter a number between 1 and 100:** {user input here, for example: 24}

**Output:** {output here, Even and less than 25 }

Continue? (y/n): {user input here, for example: Y}

**Enter a number between 1 and 100:** {user input here, for example: 75}

**Output:** {output here, 75 and Odd }

Continue? (y/n): {user input here, for example: N}

Bye!

