

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 are 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 inclusive..
- 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 and less than 60, print the number entered and "Odd and less than 60."
 - b. **1 Point:** If the integer entered is even and in the inclusive range of 2 to 24, 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 and between 26 and 60 inclusive."
 - d. **1 Point:** If the integer entered is even and greater than 60, print the number entered and "Even and greater than 60."
 - e. **1 Point:** If the integer entered is odd and greater than 60, print the number entered and "Odd and greater than 60."

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:** Set up the program to continue running with a prompt at the end to see if they want to stop. (hint: Loops)
- **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.