1. **Scenario:** A system checks if a user is eligible to vote based on their age.

   Write logic to ask the user for their age and determine if they are eligible to vote based on whether they are 18 or older

   Logic:

   - Get the age from the user
   - Using if-else statement, check if the age is below 18
   - If below 18, then print "Not Eligible"
   - Else, print "Eligible"

2. **Scenario:** A program processes a list of numbers and needs to find the largest value.

   Write logic to identify and return the largest number from a given list.

   Logic:

   - Take a list of numbers as input
   - Initialize a variable to store the first number as the largest
   - Loop through the list and compare each number with the current largest
   - If a number is greater than the current largest, update the largest
   - After the loop, print or return the largest number

3. **Scenario:** A company provides employees with a 10% bonus if their salary exceeds $50,000.

   Write logic to determine the bonus amount based on the given salary.

   Logic:

   - Get the salary from the user
   - Using if-else statement, check if the salary is greater than 50,000
   - If greater, calculate 10% of the salary as bonus and print it
   - Else, print "No Bonus"

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4. **Scenario:** A program evaluates a number to determine if it is even or odd.

   Write logic to check whether a given number is even or odd.

   Logic:
   1. Get the number from the user
   2. Use the modulo operator (%) to check if the number divided by 2 gives remainder 0
   3. If remainder is 0, then print "Even"
   4. Else, print "Odd"

5. **Scenario:** A text-processing tool reverses a given word or sentence for formatting purposes.

   Write logic to take a word or sentence as input and produce its reversed version.

   Logic:
   1. Get the word or sentence from the user
   2. Use slicing or a loop to reverse the text
   3. Print the reversed text

6. **Scenario:** A grading system determines whether a student has passed or failed based on their score.

   Write logic to check if a student has passed a subject by scoring at least 40 marks.

   Logic:
   1. Get the score from the user
   2. Using if-else statement, check if the score is 40 or above
   3. If 40 or more, print "Pass"
   4. Else, print "Fail"

7. **Scenario:** A retail store offers a 20% discount if a customer's total order exceeds $100. Write logic to calculate the final amount to be paid after applying the discount.

Logic:
1. Get the total order amount from the user
2. Using if-else statement, check if the amount is greater than 100
3. If yes, calculate 20% discount and subtract it from total
4. Print the final amount to be paid
5. Else, print the total amount without discount

8. **Scenario:** A banking system processes withdrawal requests and ensures the user has enough balance.

    Write logic to check if a user has enough balance before allowing a withdrawal and update the remaining balance accordingly.

   Logic:
   1. Get the current balance and withdrawal amount from the user
   2. Using if-else statement, check if the withdrawal amount is less than or equal to the balance
   3. If yes, subtract the withdrawal amount from the balance
   4. Print the new balance
   5. Else, print "Insufficient Balance"

9. **Scenario:** A calendar system verifies whether a given year is a leap year based on standard leap year rules.

    Write logic to determine whether a given year is a leap year.

   Logic:
   1. Get the year from the user
   2. Using if-else statement, check if the year is divisible by 4 and not by 100, or divisible by 400
   3. If true, print "Leap Year"
   4. Else, print "Not a Leap Year"

10. **Scenario:** A program filters out only even numbers from a given list.

    Write logic to extract and return only the even numbers from a list.

Logic:

1. Get a list of numbers from the user
2. Create an empty list to store even numbers
3. Loop through the original list
4. For each number, check if it is divisible by 2
5. If yes, add it to the even number list
6. After the loop, print the list of even numbers