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

   Logic:

   1. Take the user's age as input.
   2. Convert it to an integer.
   3. If the age is 18 or above, print "you are eligible to vote".
   4. Otherwise, print "you are not eligible to vote".

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

   Logic:

   1. Read the list of members.
   2. Assume that the first number is the largest.
   3. Compare each number with the current largest value.
   4. If any value is greater than the current largest value, update it.
   5. Once the process completes, the variable holds the largest value.

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

   Logic:

   1. Take the salary as input.
   2. Check if the salary is>50,000.
      - If yes, bonus =10% of salary.
      - If no, bonus =0.
   3. Print the bonus amount as output.

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

   Logic:

   1. Take a number as input.
   2. If the number is divided by 2 and get remainder as 0, print "the number is even".
   3. Otherwise, print "the number is odd"

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

   Logic:

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1. Take the string as an input.
2. To reverse the entire text, use slicing [::-1]
3. Print the reversed text as output.

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

   Logic:
   1. Take the student's score as input.
   2. Convert it to an integer.
   3. If the score is>=40, print "pass"
   4. Otherwise, pint "fail".

7. **Scenario:** A retail store offers a 20% discount if a customer's total order exceeds $100.
   Logic:
   1. Take the total order amount as input.
   2. If the total order amount is>100, apply the 20% of discount.
   3. Otherwise, print "no discount".
   4. Now less the discount from the original amount.
   5. Print the final amount as output.

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

   Logic:
   1. Have to take current balance and withdraw amount as input.
   2. Check if withdrawal amount is less than or equal to the balance.
   3. If yes means allow withdrawal and update balance.
   4. If no means print "insufficient balance".

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

   Logic:
   1. Enter a year as input.
   2. If the year is divisible by 4 but not by 100 (or) divisible by 400, then print "leap year".
   3. Otherwise print "not a leap year".

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

Logic:

1. Read the list of numbers.
2. Check if the number is even, that is num%2==0
3. If it is yes, add it to the new list.
4. Return the list of even numbers.

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