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
   1) Get input from the user that their age
   2) Check the age that 18 or older
   3) If the 18 or older print “You are eligible”
   4) Otherwise print “You are not 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
   1) Assing a varialble name to the list
   2) LargestNumber=max(“Name of the list”)
   3) Print(LargestNumber)

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
   1) Get the input that employee salary
   2) If the salary more tha 50000 UDS calculate the bonus amount for 10%
   3) And print the bonus amount
   4) If the salary less than 50000 USD print “Better luck Next time Bye Bye”

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 as a input

2) When the number divide by 2, if the remaining zero print “Even Number”
3) Otherwise print “Odd Number”

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 input from the user that word or sentence and assing a variable name to the input like “text=input(“Ender a word or sentence”)
2) Then use Python slicing technique and make the step “-1”
3) Then print the output

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) Check the student’s marks
2) If the mark 40 or mare than 40 ptint “Pass”
3) Otherwise print “You need more practice”

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) Check the customer’s order amount
2) If the amount more than 100 USD, calculate 20% discount amount
3) Then minus the discount amount from total order amount then print the final amount
4) If the amount less than 100 USD no discount print the original amount

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) Once get the request from user for withdrawal
2) Check customer's account balance
3) If customer has enough money continue to withdrawal
4) Otherwise print "You don't have enough money to withdrawal "

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 year as an input
2) If the year is divisible by 4, it is a leap year
3) Otherwise 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) Check the numbers one by one in the list
2) if a number divisible by 2, make a empty list and store the numbers
3) don't care about other number