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.

* Get the Age from the user
* Check if the age is Greater than or equal to 18,
* If true, then Print “Age is eligible to vote”.
* Else print “Age is not eligible to vote”

1. **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.

* Create list with required numbers
* Determine the largest number using max(list) and assign it to largest number
* Print the largest number

1. **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.

* Get the Salary from the Employee
* Check if the Salary is greater than $50,000
* If true, then calculate 10% percent bonus for the employee
* Print the bonus amount calculated
* Else print “Bonus is not provided for the employee”

1. **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

* Get the number from the user
* Check if the remainder is equal to 0 when the number is divided by ‘2’,
* If true, then print “Number is even”
* Else print “Number is odd”

1. **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**.**

* Get the string from the user
* Reverse the string using slicing method (s[::-1])
* Print the reversed string

1. **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.

* Get the marks from the student
* Check if the marks is greater than or equal to 40
* If true, then print “Student has passed”
* Else print “Student has failed”

1. **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

* Get the total order amount from the customer
* Check if the order amount is greater than $100,
* If true, then subtract discount amount from the total order amount
* Print “final amount to be paid after applying discount”
* Else print “final amount to be paid without discount”

1. **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

* Get the withdrawal amount from the customer
* Check if the current balance is greater than or equal to the withdrawal amount requested
* If true then process the withdrawal and calculate the balance amount by subtracting withdrawal amount from current balance in the account
* Print “withdrawal is processed, current balance amount(currenct balance – withdrawal amount)”
* Else print “insufficient balance”

1. **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

* Get the year from the user
* Check if the remainder is zero when the year is divided by 4

AND

* Check if the remainder is not equal to zero when the year is divided by 100 or if the remainder is equal to zero when the year is divided by 400
* If True then print “Given year is a leap year”
* Else print “Given year is not a leap year”

1. **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.

* Create the List with required numbers
* Use For loop to iterate each element from the list
* Check if remainder is zero when the element is divided by 2
* If true then Print respective number from the list