### **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.

1. Ask user to enter their age.

2. Check the user age is >= 18

3. If yes, the user is eligible for vote

4. Otherwise, not eligible

### **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.

**1.** Give the list of number

**2.** Compare first num with remaining all num.

**3.** This process is continue until check all num in the list

### **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.

1. Give the employee salary

2. If the salary exceeds $50, 000, then add 10% bonus

3. Otherwise, didn’t add 10%

4. Calculate total amount (salary+ bonus)

### **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.

**1.** Enter the number

**2.** If the given number is divided by 2

**3.** The Given number is **even**

**4.** Otherwise, **odd**

### **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.

1. Read the input word or sentence.

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1. Convert the input into a list of characters.
2. Reverse the order of characters.
3. Join the reversed characters into a string.
4. Return the reversed word or sentence.

### **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.

**1.** Read the student score

**2.** If the score is >=40 .The student is pass

**3.** Otherwise fail.

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.

1. Check the customer bill.

2. If the amount exceeds $100, then add 20% discount

3. Calculate the final amount.

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

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

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1. Read the withdrawal amount and current amount in user account

2. Check the withdrawal amount<=current amount in the user account

3. If sufficient balance is available, then withdrawal the amount

4. Otherwise not

### **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.

**1.** Read the input

**2.** If the year is divisible by 4 or 400, it is leap year

**3.** If the year is divisible only by 100,it is not a leap year

### **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.

**1.** Give the input in the list.

**2.** Create an empty list to store even number

**3.** Using for loop to check whether the number is divisible by 2

4. Return that number

5. Store in empty list.

### 

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