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.

   1. Ask the user to enter their age
   2. Check the age using if condition
   3. If age is 18 eligible to vote, else not eligible

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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.

   1. X = [23, 54, 12. 45, 67]
   2. Create the function for that
   3. Take the first number and compare with another
   4. If found the large number, return that

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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.

   1. Create the input field for the salary and from emp_salary
   2. Create the if condition for check salary is above 50,000 or below
   3. If exceed 50,000 and 10% **(Create the formula salary * 0.10)**
   4. In else part give the current salary

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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.

   1. Create the input filed for get the number
   2. Condition if((number%2)=1) is odd
   3. In else part its is even

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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.

1. Create the input for get the sentence
2. Use splite() method
3. [::-1] to reverse it
4. Use join to get the reversed version

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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.

   1. Create the input field for get the student mark
   2. Use the if condition to check the given mark is greater then or equal to 40 if(mark>=40)
   3. If its is greater then 40 print the the student is pass
   4. In else statement give the student is fail

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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.

   1. Create the input file to enter the total_amount
   2. Chek the if condition the amount is exceed $100 or below
   3. If amount is exceed $100 apply the below
   4. Discount_amount = (total_amount * 0.20)
   5. Bill_amount = total_amount - Discount_amount

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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.

   1. Initially Declare the minimum_balance_amount
   2. Create the input filed for the withdrawal amount
   3. Create the if condition for check the withdrawal amount is greater than minimum balance amount or below minimum balance amount

4. If the entered amount is greater then minimum_balance_amount allow to withdrawal otherwise not allow
5. If allow to withdrawal→ balance_amount = Total_amount - withdrawal_amount

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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.

1. Create the input field for get the year
2. If the year is divided by 4 its leap year
3. If the year divided by 100 but not divided 400 its not leap year
4. If the year is divided by 400, its a leap year.
5. else, it is not a leap year.

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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.

1. Create the list to store even numbers.
2. Check in the list, if each number is divided by 2.
3. If divided by2, add that number to the new list.
4. Return that list for even numbers.