### **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. Get age of the user.
  2. If age is greater than or equal to 18 then they are eligible for vote else 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. Assign list of numbers in array.
  2. Find out largest number using max function and assign it to output variable.
  3. Print output variable.

### **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. Get employee salary as an input.
  2. If salary is greater than $50,000 then salary\*10% else not eligible for 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. Get number as an input.
  2. If number % 2 is equal to 0 then it is even number else it is odd number.

### **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. Get input as string and store it in a variable.
  2. Assign output = Inputvariable [::-1]
  3. Print output variable.

### **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. Get mark of a student for a particular subject.
  2. If mark >= 40 then pass else 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. Get total amount of a customer
  2. If total amount >= $100 then Payable amount = total amount \* 20% else payable amount = total amount.

### **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.

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* 1. Get availablebalance and withdrawalamount as input
  2. If availablebalance >= withdrawalamount then availablebalance = availablebalance – withdrawalamount else not enough balance.

### **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. Get year as input
  2. If year % 4 is equal to 0 then leap year else 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.

### Assign list of numbers to input variable.

### For all numbers in lists check number % 2 is equal to 0 then print number else no process

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