

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. Get i/p from the user.
2. If i/p age is greater than or ≥ 18 eligible for voting.
- If .Else less than 18 not eligible for voting.

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. Get the i/p list from the user
2. Take the first number from the list and compare with other no's.
3. If any number is greater than the first number, take that number is largest .
4. Else the first number is return as a largest number.

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. Get the salary details from the employees.
2. If the salary amount is greater than or equal to \$50,000, add 10% bonus in the salary amount
3. Else, no bonus added.

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. Get the input numbers from the user
2. Check the number is divisible by 2 and it get the reminder 0, then the number is "EVEN"
3. Other wise the number is "ODD"

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. Get the input word or sentences
2. Change the i/p to list of character
3. Reverse the list of character
4. Merge the character in to string
5. Get the reversed word or sentences

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. Get the student score as a i/p.
2. If the student get greater than or equal to 40, the student get pass mark in the Subject
3. otherwise, the student get fail mark.

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. Get the customer total order amount as a i/p.
2. If the amount exceeds \$100, subtract 20% discount in the total amount.
3. Get the final amount to be paid

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. Take i/p as withdrawal amount
2. If the i/p amount is lesser than or equal to balance amount in the account, transaction success, display the balance amount
3. otherwise, transaction failed. display insufficient balance.

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. Get i/p year
2. If the i/p yr is divisible by 4, it's a leap year,
3. If the i/p yr is divisible by 100, it's not a leap year, unless it's also divisible by 400
4. 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.

1. Get the list of numbers as a i/p.
2. Create empty list to store even numbers
3. Check each number is divisible by 2, if YES, then send the number in to the list
3. Return the even numbers