### **Scenario:** A system checks if a user is eligible to vote based on their age.

**Ramishahope Artificial Intelligence Pvt Ltd**

**36, Old Anandas, SG Arcade, Marudhamalai Main Road, Vadavalli, Coimbatore -641041.**

**+91 6385383227 |** [**www.hopelearning.net**](http://www.hopelearning.net/) **|** [**mdaravind@hopelearning.net**](mailto:mdaravind@hopelearning.net) **| 33AAMCR3722R1ZU**

### **Logic:**

* Enter the user age.
* Check their age 18 or older.
* If yes, print “Eligible”.
* Else, print “Not eligible”

### .

### **Scenario:** A program processes a list of numbers and needs to find the largest value. Logic:

* Read the lists of numbers.
* Enter large value= max(Lists)
* Print large number is found, update the largest value

### **Scenario:** A company provides employees with a 10% bonus if their salary exceeds $50,000. Logic:

* Enter the Employee Salary.
* If the salary is greater than $50,000, calculate a 10% bonus
* Else, set the bonus to zero.

### **Scenario:** A program evaluates a number to determine if it is even or odd.

### **Logic:**

### Enter the input Number.

### Check the number divisible by 2.

### If yes, print Even

### Else, print odd

### **Scenario:** A text-processing tool reverses a given word or sentence for formatting purposes.

**Logic:**

* Enter the input word or sentence
* Then convert the input into a list of characters
* Reverse character, Join the reversed characters into a string.
* Return the reversed word or sentence.

### **Scenario:** A grading system determines whether a student has passed or failed based on their score.

### **Logic:**

* Enter the Students Marks.
* If the mark are 40 above print pass
* Else, print fail

### **Scenario:** A retail store offers a 20% discount if a customer’s total order exceeds $100. Logic:

### Enter the total order amount

### If the amount more than $100, calculate 20% discount

* Subtract the discount from the total amount.
* Return the final amount will be paid.

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

* Enter the account balance and withdrawal amount.
* If the withdrawal amount is less than or equal to the balance,
* process the withdrawal
* Subtract the withdrawal amount from the balance and return the updated balance.
* If the withdrawal amount exceeds the balance, print "Insufficient funds."

### **Scenario:** A calendar system verifies whether a given year is a leap year based on standard leap year rules.

**Ramishahope Artificial Intelligence Pvt Ltd**

**36, Old Anandas, SG Arcade, Marudhamalai Main Road, Vadavalli, Coimbatore -641041.**

**+91 6385383227 |** [**www.hopelearning.net**](http://www.hopelearning.net/) **|** [**mdaravind@hopelearning.net**](mailto:mdaravind@hopelearning.net) **| 33AAMCR3722R1ZU**

### **Logic:**

### Enter the Year

### The year is divisible by 400, it is a leap year.

* If the year is divisible by 100 but not by 400, it is not a leap year.
* If the year is divisible by 4 but not by 100, it is leap year.
* Else, that not leap year.

### **10.Scenario:** A program filters out only even numbers from a given list.

### Logic:

### Enter the Lists of the numbers Create an empty list to store even numbers.

### the list and check if each number is divisible by 2.

* If divisible, add the number to the new list.
* Return the list of even numbers.

### 