# Python logic assignment

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

- Ask user enter the age
- Eligible 18 or older check
- if yes print "Eligible to vote"
- otherwise print "not eligible to vote"

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

- Read the list of numbers.
- then fine the largest number in the list.
- use Python's built-in max() function.
- then print largest

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

- If the condition is true (salary is above $50,000), a bonus of 10% of the salary is calculated.
- If the condition is false (salary is not above $50,000), then the total_salary remains the same as the base salary.

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

- Read the input Enter the value then
- if condition use (num%2==0)
- print even number
- else print odd nmber

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

- To read the ext word
- Then use reverse to string function [::-1]
- then print txt

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

- If statement checks if student_score is greater than or equal to passing_score.
- If the condition is true
- Prints "The student passed
- If the condition is false
- prints "The student failed.

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

- Enter the total order
- Then applying 20% discount
- then using if-else statement
- print the final price is amount

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

- To write the enter the withdrawn amount
- then use if-else statement
- print "you withdrawn: "amount

- Then else print Insufficient balance

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

- Enter the leap year
- then use if statement
- check the year is divisible by 4
- print leap year
- else print not a leap year

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

- To read the number of list.

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- then use for loop if number%2==0
- print even numbers