

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 find 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 number

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

- To read the text word
- Then use reverse 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 using if-else statement
- total order exceeds \$100
- 100 above using 20% discount apply
- Then 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- To write the enter the withdrawn amount.
- if the windrow amount is greater in the balance
- then use 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- print "you withdrawn: "amount"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

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

- To read the number of list.
- then use for loop if `number%2==0`
- print even numbers