

Day 4: Comparison Operators

Problem 1: Greet the User

Description:

Create a Python program to greet the user by their name.

Problem 2: Calculate Rectangle Area

Description:

Develop a Python program to calculate the area of a rectangle using userprovided dimensions.

Problem 3: Compare Two Numbers

Description:

Write a Python program to compare two numbers and determine if they are equal.

Problem 4: Voting Eligibility Check

Description:

Create a Python program to check if a user is eligible to vote based on their age.

Problem 5: Shopping Budget Evaluation

Description:

Design a Python program to evaluate if a user can afford items within a specified budget.

Problem 6: Comparison of Two Variables

Description:

Given two variables

x=5 and y=7, write a Python expression that checks if x is greater than y. Store the result in a variable z and print it.

Problem 7: Compare Seven Numbers

Description:

Take 7 variables named

```
a, b, c, d, e, f, and g. Calculate sum1 = (a + b) * c and sum2 = d + e + f + g. Print whether sum1 is greater than sum2.
```

Problem 8: Play with Expressions

Description:

Calculate and print the result of the expression

```
(a + b) * c / d - e, where a, b, c, d, and e are variables.
```

Problem 9: Variable Swap

Description:

Write a Python program to swap the values of two variables without using a temporary variable.

Problem 10: Convert Celsius to Fahrenheit

Description:

Write a Python program that converts a given temperature in Celsius to Fahrenheit using the formula

```
^{\circ}F = (^{\circ}C \times 9/5) + 32.
```

Problem 11: Multiple of 5

Description:

Take a variable, store a number, and check if the number is a multiple of 5.

Problem 12: Same Last Digit

Description:

Take two integer variables, store integer numbers, and check if they have the same last digit without using any string conversion.

Problem 13: Even or Odd Sum

Description:

Write a Python expression to check if the sum of two given numbers is even.

Problem 14: Equal Characters Check

Description:

Check if two characters, 'A' and 'B', are equal without using conditional statements.

Problem 15: Odd or Even Check

Description:

Determine if a number is odd or even without using conditional statements.