**PYTHON CODE SNIPPET BASED ON SITUATIONS**

**#CURRENCY CONVERSIONS**

pesos = int(input("What do you have left in pesos? "))

soles = int(input("What do you have left ins soles? "))

reais = int(input("What do you have left in reais? "))

leftoverPesos = pesos \* 0.00025

leftoverSoles = soles \* 0.28

leftoverReais = reais \* 0.19

leftoverCash = leftoverPesos + leftoverSoles + leftoverReais

print(leftoverCash)

**#Ph ACIDITY MEASUREMENT**

ph = int(input("Enter a pH Value between 0 and 14: "))

if ph >= 7:

print("Basic")

elif ph <= 7:

print("Acidic")

else:

print("Neutral")

#**ADDITION OF TWO NUMBERS**

num1 = int(input("Enter first number: "))

num2 = int(input("Enter second number: "))

sum = num1 + num2

print("The sum is: ", sum)

**#ASKING USER FOR OPERATIONS FOR CALCULATIONS (MDAS)**

num1 = float(input("Enter first number: "))

num2 = float(input("Enter second number: "))

operator = input("Enter operator (+, -, \*, /): ")

if operator == "+":

    result = num1 + num2

elif operator == "-":

    result = num1 - num2

elif operator == "\*":

    result = num1 \* num2

elif operator == "/":

    result = num1 / num2

else:

    result = "Invalid operator"

print("The result is: ", result)

**#GUESSING RANDOM NUMBER PART1**

import random

secret = random.randint(1, 10)

print("I picked a number between 1 and 10. Can you guess it?")

guess = int(input("Enter your guess: "))

if guess == secret:

    print("Congratulations! You guessed it!")

elif guess < secret:

    print("Too low! The number was: ", secret)

elif guess > secret:

    print("Too high! The number was: ", secret)

else:

    print("Invalid input.")

#PART2

secret = random.randint(1, 10)

print("I picked a number between 1 and 10. Can you guess it?")

guess = 0  # start with a value that's definitely not equal to secret

while guess != secret:   # keep looping until correct

    guess = int(input("Enter your guess: "))

    if guess == secret:

        print("🎉 Correct! You guessed it!")

    elif guess < secret:

        print("Too low! Try again.")

    else:

        print("Too high! Try again.")

        '''

#LOOPING FOR LOOP

for num in range(1, 11):           # outer loop (1 to 10)

    print("Table of", num)

    for i in range(1, 11):         # inner loop (1 to 10)

        print(num, "x", i, "=", num \* i)

    print()  # blank line for readability

**#COUNTING VALUES IN A VARIABLE**

for letter in "Python":  # iterate over each character

    print(letter)

**#CALENDAR**

import calendar

def display\_calendar():

    try:

        year = int(input("📅 Enter year (e.g., 2025): "))

        month = int(input("📆 Enter month (1-12): "))

        if 1 <= month <= 12:

            print("\n" + calendar.month(year, month))

        else:

            print("❌ Invalid month. Please enter a value between 1 and 12.")

    except ValueError:

        print("⚠️ Please enter valid numeric values for year and month.")

# Run the function

display\_calendar()

**#TIP CALCULATOR WITH LOOPING**

while True:

    people = int(input("How many people? "))

    bill = float(input("Enter bill amount in PHP: "))

    percentTip = float(input("You wish to tip (%): "))

    tip = bill \* (percentTip / 100)

    totalBill = bill + tip

    perPerson = totalBill / people

    print("\n📊 Breakdown:")

    print("Bill: ₱", round(bill, 2))

    print("Tip: ₱", round(tip, 2))

    print("Total Bill (including tip): ₱", round(totalBill, 2))

    print("Each person pays: ₱", round(perPerson, 2))

    again = input("\nWould you like to calculate another tip? (yes/no): ").lower()

    if again != "yes":

        print("Thanks for using the Tip Calculator! 💸")

        break

#LOOP

for i in range(1, 25):

   print("\* " \* i)

# Ask the user for an integer

number = int(input("Enter an integer: "))

# Initialize total to 0

total = 0

# Loop through numbers from 1 to 'number' (inclusive)

for i in range(1, number + 1):

    total += i \*\* 2  # Add the square of i to total

# Print the final total

print(total)