1. Write a Python program to print "Hello Python"?

ANS: Sure, here's a simple Python program to print "Hello Python":

print("Hello Python")

When we run this program, it will display the output:

Hello Python

1. Write a Python program to do arithmetical operations addition and division.?

ANS: def addition(num1, num2):

return num1 + num2

def division(num1, num2):

if num2 == 0:

return "Error: Cannot divide by zero"

return num1 / num2

if \_\_name\_\_ == "\_\_main\_\_":

try:

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

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

sum\_result = addition(num1, num2)

division\_result = division(num1, num2)

print("Addition result: ", sum\_result)

print("Division result: ", division\_result)

except ValueError:

print("Invalid input. Please enter valid numbers.")

1. Write a Python program to find the area of a triangle?

ANS: def triangle\_area(base, height):

return 0.5 \* base \* height

if \_\_name\_\_ == "\_\_main\_\_":

try:

base = float(input("Enter the length of the base of the triangle: "))

height = float(input("Enter the height of the triangle: "))

area = triangle\_area(base, height)

print("The area of the triangle is:", area)

except ValueError:

print("Invalid input. Please enter valid numbers.")

1. Write a Python program to swap two variables?

ANS: Swap of two variables in Python using a temporary variable or by using tuple unpacking. Here's how we can do it using both methods:

Method 1: Using a Temporary Variable

def swap\_variables(a, b):

temp = a

a = b

b = temp

return a, b

if \_\_name\_\_ == "\_\_main\_\_":

try:

var1 = input("Enter the first variable: ")

var2 = input("Enter the second variable: ")

# Call the swap\_variables function to swap the values

var1, var2 = swap\_variables(var1, var2)

print("After swapping:")

print("First variable:", var1)

print("Second variable:", var2)

except ValueError:

print("Invalid input. Please enter valid values.")

Method 2: Using Tuple Unpacking

def swap\_variables(a, b):

return b, a

if \_\_name\_\_ == "\_\_main\_\_":

try:

var1 = input("Enter the first variable: ")

var2 = input("Enter the second variable: ")

# Call the swap\_variables function to swap the values using tuple unpacking

var1, var2 = swap\_variables(var1, var2)

print("After swapping:")

print("First variable:", var1)

print("Second variable:", var2)

except ValueError:

print("Invalid input. Please enter valid values.")

Both methods achieve the same result. The first method uses a temporary variable to store the value of one variable before swapping, while the second method uses tuple unpacking to directly swap the values without using a temporary variable.

1. Write a Python program to generate a random number?

ANS: import random

def generate\_random\_number(start, end):

return random.randint(start, end)

if \_\_name\_\_ == "\_\_main\_\_":

try:

start\_range = int(input("Enter the start of the range: "))

end\_range = int(input("Enter the end of the range: "))

random\_number = generate\_random\_number(start\_range, end\_range)

print("Random number:", random\_number)

except ValueError:

print("Invalid input. Please enter valid integer values for the range.")