Qno1

num1 = int(input("Enter the first integer: "))

num2 = int(input("Enter the second integer: "))

if num1 % 2 != 0 and num2 % 2 != 0:

result = num1\*2 + num2\*2

print("Sum of squares:", result)

else:

print("Calculation not performed. Both numbers should be odd.")

qno2:

ef calculate\_factorial(n):

if n < 0:

print("Factorial is not defined for negative numbers.")

else:

factorial = 1

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

factorial \*= i

print(f"Factorial of {n}: {factorial}")

# Example usage:

num = int(input("Enter a number to calculate its factorial: "))

calculate\_factorial(num)

qno3:

**ef calculate\_factorial(n):**

**if n < 0:**

**print("Factorial is not defined for negative numbers.")**

**else:**

**factorial = 1**

**for i in range(1, n + 1):**

**factorial \*= i**

**print(f"Factorial of {n}: {factorial}")**

**# Example usage:**

**num = int(input("Enter a number to calculate its factorial: "))**

**calculate\_factorial(num)**

**QNO4:**

**# Get user input**

**num\_people = int(input("Enter the number of people: "))**

**cost\_per\_meal = float(input("Enter the cost of each meal: $"))**

**sales\_tax\_percentage = float(input("Enter the sales tax percentage: "))**

**tip\_percentage = float(input("Enter the tip percentage: "))**

**# Calculate amounts**

**total\_cost\_of\_food = num\_people \* cost\_per\_meal**

**total\_sales\_tax = (sales\_tax\_percentage / 100) \* total\_cost\_of\_food**

**total\_tip\_amount = (tip\_percentage / 100) \* total\_cost\_of\_food**

**total\_bill\_amount\_per\_person = (total\_cost\_of\_food + total\_sales\_tax + total\_tip\_amount) / num\_people**

**# Print results**

**print("\n--- Bill Summary ---")**

**print(f"Total cost of food: ${total\_cost\_of\_food:.2f}")**

**print(f"Total sales tax: ${total\_sales\_tax:.2f}")**

**print(f"Total tip amount: ${total\_tip\_amount:.2f}")**

**print(f"Total bill amount per person: ${total\_bill\_amount\_per\_person:.2f}")**