**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}")**