LAB-6 WHILE LOOP

1. Write a python program to reverse a number using a while loop.

num = int(input("Enter a number: "))

reversed\_num = 0

while num > 0:

    digit = num % 10

    reversed\_num = reversed\_num \* 10 + digit

    num = num // 10

print("Reversed Number:", reversed\_num)

OUTPUT

Enter a number: 456

Reversed Number: 654

1. Write a python program to check whether a number is palindrome or not?

num = int(input("Enter a number: "))

original\_num = num

reversed\_num = 0

while num > 0:

    digit = num % 10

    reversed\_num = reversed\_num \* 10 + digit

    num = num // 10

if original\_num == reversed\_num:

    print("The number is a palindrome.")

else:

    print("The number is not a palindrome.")

OUTPUT

Enter a number: 6666776666

The number is a palindrome.

1. Write a python program finding the factorial of a given number using a while loop.

num = int(input("Enter a number: "))

factorial = 1

while num > 1:

    factorial \*= num

    num -= 1

print("Factorial:", factorial)

OUTPUT

Enter a number: 56

Factorial: 710998587804863451854045647463724949736497978881168458687447040000000000000

1. Accept numbers using input() function until the user enters 0. If user input 0 then break the while loop and display the sum of all the numbers.

total\_sum = 0

while True:

    num = int(input("Enter a number (0 to stop): "))

    if num == 0:

        break

    total\_sum += num

print("Sum of all the numbers:", total\_sum)

X

OUTPUT

Enter a number (0 to stop): 5

Enter a number (0 to stop): 6

Enter a number (0 to stop): 4

Enter a number (0 to stop): 0

Sum of all the numbers: 15