**Q1:**

# Write a Python program that prints the string "Hello Python" to the console.

str1 = "Hello Python"

print(str1)

**Q2:**

# Write a Python program that performs addition, subtraction, multiplication, and division of two numbers input by the user.

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

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

print(f"Addition: {num1 + num2}")

print(f"Subtraction: {num1 - num2}")

print(f"Multiplication: {num1 \* num2}")

print(f"Division: {num1 / num2}")

**Q3:**

# Write a Python program to generate and print a random number between a specified range.

import random

print(random.randint(0,10))

**Q4:**

# Write a Python program to display the calendar of a given month and year.

import calendar

year = int(input("Enter Year: "))

month = int(input("Enter Month: "))

print(calendar.month(year,month))

**Q5:**

# Write a Python program to check if a given year is a leap year.

yy = int(input("Enter Year: "))

if(yy % 400 == 0) and (yy % 100 == 0):

    print(f"{yy} is a leap year")

elif(yy % 4 == 0) and (yy % 100 != 0):

    print(f"{yy} is a leap year")

else:

    print(f"{yy} is not a leap year")

**Q6:**

# Write a Python program to print all prime numbers within a specified range.

num = 1

for i in range(2,num):

    if(num%i==0):

        print(f"{num} is not a prime number")

        break

else:

    print(f"{num} is a prime number")

**Q7:**

# Write a Python program to find the factorial of a number input by the user.

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

for i in range(1,num):

    num = num \* i

print(num)

**Q8:**

# Write a Python program to print the Fibonacci sequence up to a specified number of terms.

def fibonacci\_seq(n):

    if(n==0):

        return 0

    elif(n==1):

        return 1

    else:

        return fibonacci\_seq(n-1) + fibonacci\_seq(n-2)

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

print(f"Fibonacci Sequence of {n} is {fibonacci\_seq(n)}")

**Q9:**

# Write a Python program to find all Armstrong numbers within a specified range.

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

n\_digits = len(str(num))

sum = 0

temp = num

while temp > 0:

    digit = temp % 10

    sum += digit \*\* n\_digits

    temp //= 10

if num == sum:

    print(f"{num} is an armstrong number")

else:

    print(f"{num} is not an armstrong number")

**Q10:**

# Write a Python program to print the reverse of a string input by the user.

str1 = input("Enter a string: ")

print(str1[::-1])

**Q11:**

# Write a Python program to calculate and print the sum of the first ten natural numbers.

num = 10

sum = 0

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

    sum += i

print(sum)