

In [2]: *# Question 1: Print the table of 5 using a for loop.*

```
for i in range(1, 11):  
    print(f"5 x {i} = {5 * i}")
```

```
5 x 1 = 5  
5 x 2 = 10  
5 x 3 = 15  
5 x 4 = 20  
5 x 5 = 25  
5 x 6 = 30  
5 x 7 = 35  
5 x 8 = 40  
5 x 9 = 45  
5 x 10 = 50
```

In [5]: *# Question 2: Print even number series by taking input from the user.*

```
# Taking input from the user  
n = int(input("Enter the range up to which you want the even number series:  
  
# Using a for loop to print the even number series  
for i in range(2, n + 1, 2):  
    print(i)
```

```
Enter the range up to which you want the even number series: 5  
2  
4
```

In [7]: *# Question 3: Create a List and iterate through its items using a for loop.*

```
# Creating a List  
my_list = ["apple", "banana", "cherry", "date"]  
  
# Using a for loop to iterate through the List  
for item in my_list:  
    print(item)
```

```
apple  
banana  
cherry  
date
```

```
In [9]: # Question 4: Calculate the sum of numbers from 1 to 10.

# Initializing the sum variable
total_sum = 0

# Using a for loop to calculate the sum
for i in range(1, 11):
    total_sum += i # Adding each number to the total sum

# Displaying the sum
print(f"The sum of numbers from 1 to 10 is {total_sum}.")
```

The sum of numbers from 1 to 10 is 55.

```
In [10]: # Question 5: Find the factorial of a number using a for loop.

# Taking input from the user
num = int(input("Enter a number to find its factorial: "))

# Initializing factorial to 1
factorial = 1

# Using a for loop to calculate the factorial
for i in range(1, num + 1):
    factorial *= i

# Displaying the factorial
print(f"The factorial of {num} is {factorial}.")
```

Enter a number to find its factorial: 5
The factorial of 5 is 120.

```
In [11]: # Question 6: Reverse a string using a for loop.

# Taking input from the user
my_string = input("Enter a string to reverse: ")

# Initializing an empty string to store the reversed string
reversed_string = ""

# Using a for loop to reverse the string
for char in my_string:
    reversed_string = char + reversed_string

# Displaying the reversed string
print(f"The reversed string is: {reversed_string}")
```

Enter a string to reverse: ajay
The reversed string is: yaja

