

1. Introduction

This assignment will help you to consolidate the concepts learnt in the session.

2. Problem Statement

1. Write a program which accepts a sequence of comma-separated numbers from console and generate a list.

Solution 1

Source Code

```
values = input("Input some comma separated numbers : ")
list = values.split(",")
print('List : ',list)
```

Output Screenshot

```
In [26]: values = input("Input some comma separated numbers : ")
list = values.split(",")
print('List : ',list)
```

```
Input some comma separated numbers : 2,3,4,5,6,7
List :  ['2', '3', '4', '5', '6', '7']
```

2. Create the below pattern using nested for loop in Python.

```
*
* *
* * *
* * * *
* * * * *
* * * *
* * *
* *
*
*
```

Solution 2

Source Code

```
n=5;
for i in range(n):
    for j in range(i):
        print ('* ', end="")
    print('')

for i in range(n,0,-1):
```

```

for j in range(i):
    print('* ', end="")
print('')

```

Output Screenshot

```

In [2]: n=5;
        for i in range(n):
            for j in range(i):
                print('* ', end="")
            print('')

        for i in range(n,0,-1):
            for j in range(i):
                print('* ', end="")
            print('')

*
* *
* * *
* * * *
* * * * *
* * * *
* * *
* *
*

```

3. Write a Python program to reverse a word after accepting the input from the user.

Sample Output:

Input word: AcadGild

Output: dilGdacA

Solution 3

Source Code

```

word = input("Input a word to reverse: ")

for char in range(len(word) - 1, -1, -1):
    print(word[char], end="")
print("\n")

```

Output Screenshot

```

In [1]: word = input("Input a word to reverse: ")

        for char in range(len(word) - 1, -1, -1):
            print(word[char], end="")
        print("\n")

Input a word to reverse: Computer
retupmoC

```

4. Write a Python Program to print the given string in the format specified in the **sample output**.

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a SOVEREIGN, SOCIALIST, SECULAR, DEMOCRATIC REPUBLIC and to secure to all its citizens

Sample Output:

WE, THE PEOPLE OF INDIA,
having solemnly resolved to constitute India into a SOVEREIGN, !
SOCIALIST, SECULAR, DEMOCRATIC REPUBLIC
and to secure to all its citizens

Solution 4

Source Code

```
print("WE, THE PEOPLE OF INDIA,", "\n")  
print("having solemnly resolved to constitute India into a SOVEREIGN, !", "\n" )  
print("SOCIALIST, SECULAR, DEMOCRATIC REPUBLIC ", "\n" )  
print("and to secure to all its citizens")
```

Output Screenshot

```
In [2]: print("WE, THE PEOPLE OF INDIA,", "\n")  
print("having solemnly resolved to constitute India into a SOVEREIGN, !", "\n" )  
print("SOCIALIST, SECULAR, DEMOCRATIC REPUBLIC ", "\n" )  
print("and to secure to all its citizens")
```

```
WE, THE PEOPLE OF INDIA,  
  
having solemnly resolved to constitute India into a SOVEREIGN, !  
  
SOCIALIST, SECULAR, DEMOCRATIC REPUBLIC  
  
and to secure to all its citizens
```

NOTE: The solution shared through Github should contain the source code used and the screenshot of the output.

3. Output

N/A