

WEEK #3

Objectives

- ☐ To learn pattern printing using loops in Python.
- ☐ To perform basic string manipulations and indexing.

Outcomes

After completing this week, the students would be able to:

- ☐ Print various patterns using loops.
- ☐ Manipulate strings and perform operations based on string indexes.

Problems

1. Write a program to print the following pattern using the for loop:

```
5 4 3 2 1
4 3 2 1
3 2 1
2 1
1
```

Print Pattern

```
for i in range(5, 0, -1):
```

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

```
        print(j, end=" ")
```

```
    print()
```

```
5 4 3 2 1
4 3 2 1
3 2 1
2 1
1
```

```
PS C:\Users\hp\Documents\Suhel\3rd - Sem\Lab-Manual-III>
```

2. Write a program to print the following star pattern using the for loop:

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


5. Write a program to remove characters from a string starting from the nth position to the last and return a new string. Example: `remove_chars("aligarh", 3)` should output ali.

Removing

```
def remove_chars(str = "aligarh", n=3):
```

```
    for i in str[0:n-1]:
```

```
        print(i, end="")
```

```
remove_chars()
```

```
print()
```

```
remove_chars("Mummy", 4)
```

```
al
```

```
Mum
```

```
PS C:\Users\hp\Documents\Suhel\3rd - Sem\Lab-Manual-III>
```

