PROGRAMS AND CONTROL STATEMENTS

- **WRITE A PROGRAM TO FIND THE SUM OF SERIES 1! +2! +3!...+N!**
- **PROGRAM:-**

```
n = int("enter n values:")
fact = 1
if(n==0):
   fact = 1
sum = 0
for i in range (1,n+1)!
     fact = fact*i
     sum = sum + fact
print(sum)
```

- **OUTPUT:-**

Enter n value = 7

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PROGRAMS AND CONTROL STATEMENTS

- **WRITE A PROGRAM TO FIND SUM OF SERIES 9 +99+999+9999…..+N**
- **PROGRAM:-**

```
n=int(input("Enter the range of number:"))
sum=0
p=9
for i in range(1,n+1):
    sum += p
    p=(p*10)+9
print("The sum of the series = ",sum)
```

- **OUTPUT:-**

```
Enter the range of number:8
The sum of the series =  111111102
```

PROGRAMS AND CONTROL STATEMENTS

- **NUMBER PYRAMID – REVERSE PYRAMID OF NUMBERS**
- **PROGRAM:-**

```
rows = 6
for i in range(1, rows):
    for j in range(i, 0, -1):
        print(j, end=' ')
    print(" ")
```

- **OUTPUT:-**

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

PROGRAMS AND CONTROL STATEMENTS

- **PYRAMID PATTERN – RIGHT START PATTERN OF STAR**
- **PROGRAM:-**

```
rows = 5
for i in range(0, rows):
    for j in range(0, i + 1):
        print("*", end=' ')
    print("\r")

for i in range(rows, 0, -1):
    for j in range(0, i - 1):
        print("*", end=' ')
    print("\r")
```

- **OUTPUT:-**

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

PROGRAMS AND CONTROL STATEMENTS

- **PRINT ALL THE LEAP YEAR FROM 1900 – 2000**
- **PROGRAM:-**

```
print("Leap Years from 1900-2000 are: ")
for i in range(1900,2000):
    if(i%4==0):
        print(I , end=' ')
```

OUTPUT:-

Leap Years from 1900-2000 are:

1900 1904 1908 1912 1916 1920 1924 1928 1932 1936 1940 1944
1948 1952 1956 1960 1964 1972 1976 1980 1984 1988 1992 1996