

Expt. No. : 4(a)
Date : 11-1-2023

NUMBER SERIES

PROGRAM:

```
# Print Arithmetic series 1 4 7 10...  
n=int(input('Enter number of terms : '))  
i=0  
a=1  
while(i<n):  
    print(a,end=',')  
    i+=1  
    a+=3
```

OUTPUT:

```
Enter number of terms : 10  
1,4,7,10,13,16,19,22,25,28
```

Expt. No. : 4(b)
Date : 11-1-2023

NUMBER SERIES

PROGRAM:

```
# Program to Find the sum of series  $1^3+2^3+3^3+4^3+...+N^3$ .  
n=int(input('Enter number of terms : '))  
i=1  
sum=0  
while(i<=n):  
    sum+=i**3  
    i+=1  
print('The sum is',sum)
```

OUTPUT:

```
Enter number of terms : 10  
The sum is 3025
```

PROGRAM:

```
n=int(input('Enter a number : '))
for i in range(1,n+1):
    for j in range(1,i+1):
        print(j,end=' ')
    print()
```

OUTPUT:

```
Enter a number : 5
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

Expt. No. : 4(D)
Date : 11-1-2023

PYRAMID PATTERN

PROGRAM:

```
n=int(input('Enter number of rows : '))
a='*'
for i in range(n,0,-1):
    print(a*i,end=' ')
    print()
```

OUTPUT:

```
Enter number of rows : 5
*****
****
***
**
*
```

Expt. No. : 4(E)
Date : 11-1-2023

BINARY TO DECIMAL

PROGRAM:

```
# convert binary to decimal
n=int(input('Enter binary number : '))
s=0
i=0
while(n>0):
    r=n%10
    s+=r*(2**i)
    n//=10
    i+=1
print(s)
```

OUTPUT:

```
Enter binary number : 1010
10
```