

Programs:

- 1 . Program to print Sum of squares of first n natural numbers
- 2 . Program to check whether a number is Strong Number or Not.

A Strong number is a special number whose sum of the all digit's factorial should be equal to the number itself.

Ex:

num = 145

1! = 1

4! = 4*3*2*1 = 24

5! = 120

sum = 1+24+120 = 145.

Hence, It is a Strong Number

- 3 . Print this Pattern:

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

(Here n=5)

- 4 . Print this Pattern

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

(Here n=5)

- 5 . Print this Pattern

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

(Here n=5)

- 6 . Program to find the second Largest Number in a list entered by user
- 7 . Program to Find the Largest Even and Largest Odd Number in a list
- 8 . Program to check whether a Number is Armstrong or Not.

Armstrong Number is a Number such that the sum of the cubes of its digits is equal to the number itself. Armstrong numbers are 0, 1, 153, 370, 371, 407, etc.

Ex:.

$$\begin{aligned}153 &= 1*1*1 + 5*5*5 + 3*3*3 \\ &= 1 + 125 + 27 \\ &= 153\end{aligned}$$

OUTPUT:

- 1

```
for i in range(5):  
    print(i)
```

- 2

```
for i in range(1,2,3):  
    print(i)
```

- 3

```
for i in range(10, 2, -2):  
    print(i, "Hello")
```

- 4

```
for i in range(7, -2, -9):  
    for j in range(i):  
        print(j)
```

- 5

```
x=1234
while x%10:
    x=x//10
    print(x)
```

- 6

```
n=30
for i in range(2,n//4):
    if n%i == 0:
        print("thon")
    else:
        print("Bye")
```

- 7

```
for i in [10,20,30]:
    print("Hello", i)
```

- 8

```
x = 7
for i in range(x):
    if x==5:
        break
    print("H")
print(x)
```

- 9

```
L = [13, 12, 21, 16, 35, 7, 4]
s=5
s1=3
for i in L:
    if i%4==0:
        s=s+i
        continue
    if i%7==0:
        s1=s1+i
print(s, end="")
print(s1)
```

- 10

```
count = 1

def doThis():
    global count

    for i in (1)
```

- 11

```
mylist = [5,7,8,1,8]
mylist.sort()
print(mylist)
```

- 12

```
mylist = [5,7,8,1,8]
mylist.sort(reverse=False)
print(mylist)
```

- 13

```
def sorting(num):
    return len(str(num))

numbers = [123, 4567, 89, 12, 34567]
print(numbers)
```

- 14

```
fruits = ["apple", "orange", "mango", "banana"]
print(fruits.sort())
print(fruits.sort(reverse=False))
```

- 15

```
fruits = ["apple", "orange", "mango", "banana"]
print(fruits[-4:-1])
print(fruits[-4:])
print(fruits[:4])
```

- 16

```
i = 5
while True:
    if i%0011 == 0:
        break
    print(i)
    i=i+1
```

- 17

```
x=5
while(x<15):
    print(x**2)
    x+=3
```

- 18

```
for i in range(5):
    for j in range(i):
        print("A", end="")
    print()
```

- 19

```
num = 7
for i in 7:
    print(num)
```

- 20

```
s1 = "silicon Institute"
count=0
for x in s1:
    if x!="i":
        count+=1
print(count)
```