

Programs of Function

In [3]: *# write a python f() to print cube of a given no.*

```
def cube():  
    n=int(input("Enter a no. to find Cube: "))  
    print(f"Cube of {n} is: {n*n}")  
  
cube()
```

Enter a no. to find Cube: 5
Cube of 5 is: 25

In [13]: *# 1) write a f() to check whether a no. is even or not*

```
def even():  
    n=int(input("Enter a no.: "))  
    if n%2==0:  
        print(f"{n} is Even")  
    else:  
        print(f"{n} is Not Even")  
  
even()
```

Enter a no.: 65
65 is Not Even

In [21]: *# 2) write a python f() to check whether a number is prime or not*

```
def prime():  
    prime=0  
    n=int(input("Enter a no.: "))  
    for i in range(1,n+1):  
        if n%i==0:  
            prime+=1  
    if prime==2:  
        print(f"{n} is Prime")  
    else:  
        print(f"{n} is Not Prime")  
  
prime()
```

Enter a no.: 17
17 is Prime

In [31]: # 3) write a python f() to create list of prime no. b/w two given no.

```
def prime_no_List():
    prime=0
    sp,ep=[int(i) for i in input("Enter two no. by giving space to get l[] of prime no. : ")]
    l=[]
    n=sp+1
    while n<ep:
        for i in range(2,n):
            if n%i==0:
                prime+=1
        if prime==0:
            l.append(n)
        prime=0
        n+=1
    print(f"Prime no Between {sp} to {ep} : {l}")
prime_no_List()
```

Enter two no. by giving space to get l[] of prime no.: 10 20
Prime no Between 10 to 20 : [11, 13, 17, 19]

In [35]: # 4) write a python f() to remove duplicate elements from a given List

```
def remove_Duplicate():
    s=[i for i in input("Enter Elements by giving space: ").split()]
    for i in s:
        if s.count(i)>1:
            # duplicate_Index = s.index(i)
            s.remove(i)
            # print(s)
            # s.insert(duplicate_Index,i)
    print(s)
remove_Duplicate()
```

Enter Elements by giving space: nikhil 25 monu 12 nikhil 12 kjgh gb 25
['monu', 'nikhil', '12', 'kjgh', 'gb', '25']

In [11]: # 5) write a python f() which receives variable length argument to filter odd & even no.

```
def filter_even_odd(*t):
    odd = [i for i in t if i%2>0]
    even = [i for i in t if i%2==0]
    print("Odd no. :",odd)
    print("Even no. :",even)

n = [int(i) for i in input("Enter no. by giving space to filter odd & even no. : ")]
filter_even_odd(*n)
```

Enter no. by giving space to filter odd & even no.: 1 2 5 4 7 8 9 6 5 4 78 45
69 52 3 6 9 7 4 5 54 5 4 6 3 2 1
Odd no. : [1, 5, 7, 9, 5, 45, 69, 3, 9, 7, 5, 5, 3, 1]
Even no. : [2, 4, 8, 6, 4, 78, 52, 6, 4, 54, 4, 6, 2]

In [13]: *# 6) write a Lambda f() to print all factors of a given no. in the form of list*

```
n = int(input("Enter a no. to find Factors : "))
x = (lambda a:[i for i in range(1,a+1) if a%i==0])(n)
print(x)
```

Enter a no. to find Factors : 1024

[1, 2, 4, 8, 16, 32, 64, 128, 256, 512, 1024]

In []: