1.Python Program for Find reminder of array multiplication divided by n

In [1]:
```
from functools import reduce


def find_remainder(arr, n):
    sum_1 = reduce(lambda x, y: x*y, arr)
    remainder = sum_1 % n
    print(remainder)


arr = [100, 10, 5, 25, 35, 14]
n = 11
find_remainder(arr, n)
```

```
9
```

2.Python Program to check if given array is Monotonic

In [2]:
```
def isMonotonic(A):

    return (all(A[i] <= A[i + 1] for i in range(len(A) - 1)) or
            all(A[i] >= A[i + 1] for i in range(len(A) - 1)))

A = [6, 5, 4, 4]

print(isMonotonic(A))
```

```
True
```

3.Python program to interchange first and last elements in a list

In [3]:
```
def swapList(newList):
    size = len(newList)

    temp = newList[0]
    newList[0] = newList[size - 1]
    newList[size - 1] = temp

    return newList

newList = [12, 35, 9, 56, 24]

print(swapList(newList))
```

```
[24, 35, 9, 56, 12]
```

4.Python program to swap two elements in a list

In [4]:
```
def swapPositions(list, pos1, pos2):

    list[pos1], list[pos2] = list[pos2], list[pos1]
    return list

List = [23, 65, 19, 90]
pos1, pos2  = 1, 3

print(swapPositions(List, pos1-1, pos2-1))
```

```
[19, 65, 23, 90]
```

5. write a program to find length of list

In [5]:
```
test_list = [ 1, 4, 5, 7, 8 ]

print ("The list is : " + str(test_list))

counter = 0
for i in test_list:

    counter = counter + 1

print ("Length of list using naive method is : " + str(counter))
```

```
The list is : [1, 4, 5, 7, 8]
Length of list using naive method is : 5
```

6.write a program to check if element exists in list

In [6]:
```
test_list = [ 1, 6, 3, 5, 3, 4 ]

print("Checking if 4 exists in list ( using loop ) : ")

for i in test_list:
    if(i == 4) :
        print ("Element Exists")

print("Checking if 4 exists in list ( using in ) : ")

if (4 in test_list):
    print ("Element Exists")
```

```
Checking if 4 exists in list ( using loop ) :
Element Exists
Checking if 4 exists in list ( using in ) :
Element Exists
```

7. write a program to clear a list in Python

In [7]:
```
GEEK = [6, 0, 4, 1]
print('GEEK before clear:', GEEK)

GEEK.clear()
print('GEEK after clear:', GEEK)
```

```
GEEK before clear: [6, 0, 4, 1]
GEEK after clear: []
```

8. write a program to Reversing a List

In [8]:
```
lst=[10, 11, 12, 13, 14, 15]

l=[]
for i in lst:
  l.insert(0,i)
print(l)
```

```
[15, 14, 13, 12, 11, 10]
```

9. write a program to find sum of elements in list

In [9]:
```
total = 0

list1 = [11, 5, 17, 18, 23]

for ele in range(0, len(list1)):
    total = total + list1[ele]

print("Sum of all elements in given list: ", total)
```

```
Sum of all elements in given list:  74
```

10. write a program to Multiply all numbers in the list

In [10]:
```
def multiplyList(myList) :

    result = 1
    for x in myList:
         result = result * x
    return result

list1 = [1, 2, 3]
list2 = [3, 2, 4]
print(multiplyList(list1))
print(multiplyList(list2))
```

```
6
24
```

In [ ]:
```

```