

## ASSIGNMENT 4

1] Write a python program to find all the values in a list that are greater than a specified number. (Use list comprehension)

```
mylist = [int(i) for i in input().split(' ')]
num = int(input("Enter a number : "))
glist = [i for i in mylist if (int(i)>num)]
```

2] Write a python program to find the list of words that are longer than n from a given list of words.(use mystr.split()).

e.g : mystr = "The quick brown fox jumps over the lazy dog", n=3

Output : ['quick', 'brown', 'jumps', 'over', 'lazy']

```
num = int(input("Enter a number : "))
mylist = [i for i in input().split(' ')]
print([i for i in mylist if (len(i)>num)])
```

3] Write a python program to print the numbers of a specified list after removing even numbers from it.

```
mylist = [int(i) for i in input().split(' ')]
print([i for i in mylist if i%2==1])
```

4] Write a python program to generate all permutations of a list in python. (import itertools)

Print (list(itertools.permutations([1,2,3])))

```
import itertools
print("Enter elements of list : ")
print(list(itertools.permutations([int(i) for i in input().split(' ')])))
```

5] Write a python program to convert a list of characters into a string. (use join).

```
print("Enter a list of characters : ")
mylist = [i for i in input().split(' ')]
mystr = "".join(mylist)
print(mystr)
```

**6] Write a python program to get the largest number from a list.**

```
mylist = [int(i) for i in input().split(' ')]
unique = list(set(mylist))
unique.sort()
print("Largest number in list is : ",unique[len(unique)-1])
```

**7] Write a python program to remove duplicates from a list.**

```
Mylist,newlist = [int(i) for i in input().split(' ')],0
for item in mylist:
    if (item not in newlist):
        newlist.append(item)
print(newlist)
```

**8] Write a python program to find the second smallest number in the list.**

```
mylist = [int(i) for i in input().split(' ')]
unique = list(set(mylist))
unique.sort()
print("Largest number in list is : ",unique[len(unique)-2])
```

**9] Write a python program to count the number of elements in a list within a specified range.**

```
print("Enter elements of list : ")
mylist,count = [int(i) for i in input().split(' ')],0
l,r = input("Enter the bounds for range : ").split(' ')
for item in mylist:
    if (item<=int(r) and item>=int(l)):
        count = count+1
print("Number of elements in the given range : ",count)
```

**10] Write a python program to convert a list of multiple integers into a single integer. (Use join, but convert to str first).**

```
mylist = [i for i in input().split(' ')]
mynum = int("".join(mylist))
print(mynum)
```

**11] WAPP to make a flat list out of a list of lists.**

```
mylist,newlist = [[1,2,3],[7 ,8 ,9],[11,22,33]],[]
for item in mylist:
    newlist.extend(item)
print(newlist)
```