Set & Tuple:

1. Write a program to get all subsets of given size of a set.
2. Write a user defined function to find the common elements among three lists.
3. Write a program to filter all lowercase characters Tuples.
4. Using lambda write a program to filter all positive values from Tuples.
5. Write a program to remove duplicate tuples irrespective of their order.

Exercise 1 –
Program –

```
from itertools import combinations

arr = set(map(int, input().split()))
r = int(input())
if(r<=len(arr)):
     print(list(combinations(arr, r)))
else:
     print("Not possible.")
```

Exercise 2 –
Program –

```
def common():
  l1 = list(map(int, input().split()))
  l2 = list(map(int, input().split()))
  l3 = list(map(int, input().split()))

  l1 = set(l1)
  l2 = set(l2)
  l3 = set(l3)

  a = set()

  for i in l1:
    if i in l2:
      a.add(i)

  for i in a:
    if i in l3:
      print(i, end=" ")

common()
```

Exercise 3 –
Program –

```
ls = []

print("To stop the input just press enter.")
ip = tuple(map(str, input().split()))
ls.append(ip)

while(ip != ()):
    ip = tuple(map(str, input().split()))
    ls.append(ip)

ls.pop()

ans = []

for i in range(len(ls)):
    flag = 0
    for j in range(len(ls[i])):
        if(ls[i][j].islower() != True):
            flag = 1
            break

    if(flag == 0):
        ans.append(ls[i])

print(ans)
```

Exercise 4 –
Program –

```
ls = []

print("To stop the input just press enter.")
ip = tuple(map(int, input().split()))
ls.append(ip)

while(ip != ()):
    ip = tuple(map(int, input().split()))
    ls.append(ip)

ls.pop()

result = list(filter(lambda i: all(x>=0 for x in i) , ls))

print(result)
```

Exercise 5 –
Program –

```
ls = []

print("To stop the input just press enter.")
ip = tuple(map(int, input().split()))
ls.append(ip)

while(ip != ()):
    ip = tuple(map(int, input().split()))
    ls.append(ip)

ls.pop()

ans = []

for i in range(len(ls)):
    ans.append(tuple(sorted(ls[i])))

print(set(ans))
```