**PROGRAM 1.a**

a=[(1,2,3),(4,5,6)]

b=[]

for i in a:

sum=0

for j in i:

sum+=j

b.append(sum)

print(b)

**OUTPUT**

[6, 15]

**PROGRAM 1.b**

d={'key1':'abc','key2':'def'}

print("combinations")

for i in d['key1']:

for j in d['key2']:

print(i+j)

**OUTPUT**

combinations

ad

ae

af

bd

be

bf

cd

ce

cf

**PROGRAM 1.c**

l=[1,2,3]

print("All possible combinatins")

for i in l:

for j in l:

print(f"({i},{j})")

**OUTPUT**

All possible combinatins

(1,1)

(1,2)

(1,3)

(2,1)

(2,2)

(2,3)

(3,1)

(3,2)

(3,3)