Assignment-6

Ans 1

```
for i in range(int(input()))
    A,B,A1,B1,A2,B2 = map(int,input().split())
    if (A==A1 or A==B1) and (B==A1 or B==B1):
        print(1)
    elseif (A==A2 or A==B2) and (B==A2 or B==B2):
        print(2)
    else:
        print(0)
```

```
4
2 3 5 6 7 8
0
4 3 1 4 3 2
0
1 2 2 1 3 4
1
3 4 2 1 4 3
2
```

Ans 2

```
for t in range(int(input())):
    b = list(map(int,input().split()))
    a = set(b)
    if len(a)==1:
        print(0)
```

```
elif len(a) == 2 and b.count(b[0]) != 2:
    print(1)
else :
    print(2)
```

```
3
1 4 3 2
2
4 5 5 5
1
2 2 2 2
0
```

Ans 3

```
import datatime
# data and time in yyyy/mm/dd format
d1 = datatime.datatime(2018,5,3)
d2 = datatime.datatime(2018,6,1)
print("d1 is greater than d2 :", d1>d2)
print("d1 is less than d2 :", d1<d2)
print("d1 is equal to d2 :", d1==d2)
```

d1 is greater than d2 : False.
d1 is less than d2 : True.
d1 is equal to d2 : True.

Ans4.

```
import math
Kilometer1 = int(input("First KM:"))
meter1 = int(input("First MM:"))
Kilometer2 = int(input("Second KM:"))
meter2 = int(input("Second MM:"))
print("First distence is", Kilometer1, "KM", "and", meter1,
                                                "meters\n")
print("second distence is", Kilometer2, "KM", "and", meter2,
                                                "meters\n")

# Addition of both distances
total km = (Kilometer1+(meter1/1000))+(Kilometer2+(meter2/1000))
result = math.modf(totalKm)
dec,integer = result
print("The sum Addition of the given distances is:", integer1,
                    "KM", 'and' dec*1000, "meters\n")

#Substraction of both distances.
totalkm1 = (Kilometer1+(meter1/1000))-(Kilometer2+(mter2/1000))
result1 = math.modf(totalKm2)
dec.integer1 = result1
print("The Subraction of the given distance is",
            integer1, "KM", "and", dec1*1000, "Meters\n")

# multiplication of both distance.
totalKm2 = (Kilometer1+(meter1/1000))*(Kilometer2+(meter2/100
result2 = math.modf(totalKm2)
dec.integer2 = result2
print("The multiplication of given distance is", integer2,
                    "KM", "and", dec2*1000, "Meters\n")
```

```
#division of both distance
total km3 =(kilometer1+(meter1/1000))/(kilometer2+(meter2/1000))
result 3 = math.modf(total km3)
dec3,integer3 =result3
print("The Division of the given distance "is", integer3,
                "KM", "and", dec3*1000,"Meters\n")
```

First KM :10

First MM: 222

Second KM:11

Second MM:33

First distance is 10KM and 222 meters

Second distance is 11 KM and 333 meters

The Addition of the given distence is 21.0KM and
554.999999998 meters

The Sobractions of the given distance is -1.0 KM and
-111.00000000000065 meters

The multiplication of the given distance is 115.0KM
and 845.9259999999999915 meters

The Division of the given distance is 0.0 KM and
901.9677049324 98 meters.

Ans5

```
Class Box:
def __init__(self,length,Breadth,Depth):
    self.Length=Length
    self.Breadth = Breadth
    self.Depth =Depth.
def .display(self):
    print("Length:", self.Length)
    print("Breadth:", self.Breadth)
    print("Depth :", self.Depth)
    Volume = (self.Length * self.Breadth *self.Depth)
    print("Volume of the given cube is :",Volume)

class WeightBox(Box)
  def __init__(self,length,Breadth,Depth,Weight):
   Box.__init__(self,length,Breadth,Depth)
    self.Weight=Weight
    def display(self):
     Box.display(self)
     print("Weight: "self.Weight)

  class colour(WeightBox)
    def __init__(self,Length,Breadth,weight,colour):
       WeightBox.__init__(self,length,Breadth,Depth,Weight)
        self.colour=colour
```

```
def display(self):
    print("Length:", self.Length)
    print("Breadth:", self.Breadth)
    print("Depth:", self.Depth)
    Volume = (self.Length * self.Breadth * self.Depth)
    print("Volume of the given cube is:" Volume)
    print("Weight :", self.Weight)
    print("Colour :", self.Colour)
e = Colour(45,6 ; 2Kg", "Red")
e.display()
```

```
Length : 4
Breadth : 5
Depth : 6
Volume of the given cube is : 120
Weight : 2Kg
Colour : Red.
```