```
import datetime
d1 = datetime.datetime(2022, 11, 3)
d2 = datetime.datetime(2022, 11, 1)
print("Is d1 > d2 : ", d1 > d2)
print("Is d1 <  d2 : ", d1 < d2)
print("Is d1 == d2 : ", d1 == d2)
```

```
Is d1 > d2 :  True
Is d1 <  d2 :  False
Is d1 == d2 :  False
```

```
def GetDistance():
        print("Enter first distance")
        m1=int(input("Enter M: "))
        km1 = int(input("Enter KM: "))
        print("Enter second distance")
        m2=int(input("Enter M: "))
        km2 = int(input("Enter KM: "))
        add(m1,km1,m2,km2)
        sub(m1,km1,m2,km2)
        multiplication(m1,km1,m2,km2)
        division(m1,km1,m2,km2)
def add(m1,km1,m2,km2):
        m = m1 + m2
        km = km1 + km2
        km = km + (m//1000)
        m = m % 1000
        print('Addition of Distances ',km,'kms', m,' mts')
def sub(m1,km1,m2,km2):
  if m1 >= m2:
    m = m1 - m2
  else:
     m = m2 -m1
  if km1 >= km2:
    km = km1 - km2
  else:
     km = km2 -km1
  km = km + (m//1000)
  m = m % 1000
  print('Subtraction of Distances ',km,'kms', m, ' mts')
def multiplication(m1,km1,m2,km2):
  m = m1 * m2
  km = km1 * km2
  km = km + (m//1000)
  m = m % 1000
  print('Multiplication of Distances ',km,'kms', m, ' mts')
def division(m1,km1,m2,km2):
  m = m1 / m2
  km = km1 / km2
  km = km + (m//1000)
  m = m % 1000
  print('Division of Distances ',km,'kms', m, ' mts')
GetDistance()
```

```
Enter first distance
Enter M: 500
Enter KM: 4
Enter second distance
```

```
Enter M: 500
Enter KM: 5
Addition of Distances  10 kms 0  mts
Subtraction of Distances  1 kms 0  mts
Multiplication of Distances  270 kms 0  mts
Division of Distances  0.8 kms 1.0  mts
```

```
class Box:
        length = 100
        breadth = 200
        width = 300
        print("In box")
class WeightBox(Box):
     weight = 25
     print("In weightbox")
class ColorWeightBox(WeightBox):
        color = 'Blue'
        print("In ColorWeightBox")
instance1 = ColorWeightBox()
print('Length is ',instance1.length)
print('Breadth is ',instance1.breadth)
print('Width is ',instance1.width)
print('Weigth is ',instance1.weight)
print('Color is ',instance1.color)
```

```
In box
In weightbox
In ColorWeightBox
Length is  100
Breadth is  200
Width is  300
Weigth is  25
Color is  Blue
```

```
from itertools import combinations
sets = int(input("Enter number of problems in a set "))
diff_levels = input('Enter problem difficulty levels seperated by space ')
comb = combinations(diff_levels.split(), sets)
print('Number of combinations',len(list(combinations(diff_levels.split(), sets))))
print('Below are the possible combinations')
for it in list(comb):
 print(it)
```

```
Enter number of problems in a set 2
Enter problem difficulty levels seperated by space A1 A2 A3 A4
Number of combinations 6
Below are the possible combinations
('A1', 'A2')
('A1', 'A3')
('A1', 'A4')
('A2', 'A3')
('A2', 'A4')
('A3', 'A4')
```