

Problem statement

```
# Python Program to accept three distinct digits and print all possible combinations from the digits.
```

Case 1:

```
Enter first number:1
Enter second number:2
Enter third number:3
1 2 3
1 3 2
2 1 3
2 3 1
3 1 2
3 2 1
```

Case 2:

```
Enter first number:5
Enter second number:7
Enter third number:3
5 7 3
5 3 7
7 5 3
7 3 5
3 5 7
3 7 5
```

```
In [25]: arr=list(map(int,input("Enter 3 numbers").split()))
from itertools import permutations
for d in permutations(arr):
    print(d,end=",")
```

```
Enter 3 numbers1 2 3 4
(1, 2, 3, 4),(1, 2, 4, 3),(1, 3, 2, 4),(1, 3, 4, 2),(1, 4, 2, 3),(1, 4, 3, 2),
(2, 1, 3, 4),(2, 1, 4, 3),(2, 3, 1, 4),(2, 3, 4, 1),(2, 4, 1, 3),(2, 4, 3, 1),
(3, 1, 2, 4),(3, 1, 4, 2),(3, 2, 1, 4),(3, 2, 4, 1),(3, 4, 1, 2),(3, 4, 2, 1),
(4, 1, 2, 3),(4, 1, 3, 2),(4, 2, 1, 3),(4, 2, 3, 1),(4, 3, 1, 2),(4, 3, 2, 1),
```

Exercise Team 3

Q1.WAP in python arrange string characters such that lowercase letters should come first
 Q2.WAP to print sum of prime numbers in given list input :- 2 4 5 6 7 3 8 output :- 17
 Q3.when do we use nested for loop.Write an example.
 Q4.WAP in python remove all characters from a string except integers(ex:- STR="H56U1E9JIG3l4w2" ,o/p:-5619342(only display integers))
 Q5.WAP to take a list and find the position of the item .(eg= [45,12,66,2,33] if i take 66 then it shows the index 2)

```
In [30]: str1=input("ENter the string ")
upper=""
lower=""
for i in str1:
    if i.islower():
        lower+=i
    else:
        upper+=i
print(lower+upper)
```

Enter the string ABCDEGFHAJhjhjhjhjshasjsakj
hjhjhjhjshasjsakjABCDEGFHAJ

In [78]:

```
In [84]: def isprime(number):
    flag=True
    for i in range(2,number):
        if number%i==0:
            flag=False
    return flag

ls=list(map(int,input("Enter the numbers").split()))
sums=0
for i in ls:
    if isprime(i):
        sums+=i
print(sums)
```

Enter the numbers1 23 4 5 6 7 8 9
36

Q3.when do we use nested for loop.Write an example.

If a loop exists inside the body of another loop, it's called a nested loop. Here's an example of the nested for loop.

```
// outer loop
for (int i = 1; i <= 5; ++i) {
    // codes

    // inner loop
    for(int j = 1; j <=2; ++j) {
        // codes
    }
    ..
}
```

Q4.WAP in python remove all characters from a string except integers(ex:-
STR="H56U1E9JIG3l4w2" ,o/p:-5619342(only display integers))

```
In [88]: str1=input("Enter the number ")
op=""
for i in str1:
    od= ord(i)
    if od >= 48 and od <=57:
        op+=i
print(op)
```

Enter the numbwe ywetwetq7867213u12u3y192y3812y38y123
7867213123192381238123

```
In [91]: ls1=list(map(int,input("Enter the list").split()))
num= int(input("Enter the number"))
print("Index position is ",ls1.index(num))
```

Enter the list11 22 33 44 55
Enter the number44
Index position is 3

In []: