

DICTIONARY

```
In [2]: ▶ #Add rollno and marks {name:mark} for n number of students through keyboard in a dictionary
import operator
n=int(input("Enter no of records"))
d={}
for i in range(1,n+1):
    name= input("Enter name %d"%(i))
    mark=int(input("Enter mark %d"%(i)))
    d[name]=mark
    print(d)
sorted_a= sorted(d.items(), key=operator.itemgetter(0),reverse=True)
print(sorted_a)
```

```
Enter no of records4
Enter name 1Pranav
Enter mark 198
{'Pranav': 98}
Enter name 2Nachi
Enter mark 299
{'Pranav': 98, 'Nachi': 99}
Enter name 3Ravi
Enter mark 3100
{'Pranav': 98, 'Nachi': 99, 'Ravi': 100}
Enter name 4Vinod
Enter mark 496
{'Pranav': 98, 'Nachi': 99, 'Ravi': 100, 'Vinod': 96}
[('Vinod', 96), ('Ravi', 100), ('Pranav', 98), ('Nachi', 99)]
```

```
In [2]: ▶ #Add name and salary {name:salary} for n number of employees through keyboard in a dictionary
import operator
n=int(input("Enter no of records"))
d={}
for i in range(1,n+1):
    name= input("Enter name %d "%(i))
    mark=int(input("Enter salary %d "%(i)))
    d[name]=mark
    print(d)
sorted_a= sorted(d.items(), key=operator.itemgetter(0),reverse=False)
print(sorted_a)
```

```
Enter no of records2
Enter name 1 pki
Enter salary 1 2546
{'pki': 2546}
Enter name 2 rg
Enter salary 2 562
{'pki': 2546, 'rg': 562}
[('pki', 2546), ('rg', 562)]
```

In [1]:  *#Add name and salary {name:salary} for n number of employees through keyboard in a d*

```
import operator
n=int(input("Enter no of records"))
d={}
for i in range(1,n+1):
    name= input("Enter name %d"%(i))
    mark=int(input("Enter salary %d"%(i)))
    d[name]=mark
    print(d)
sorted_a= sorted(d.items(), key=operator.itemgetter(1),reverse=False)
print(sorted_a)
print("sum=%d  "%sum(d.values()))
print("max=%d  "%max(d.values()))
print("min=%d  "%min(d.values()))
print("avg=%d  "%(sum(d.values())/2))
```

```
Enter no of records2
Enter name 1pranav
Enter salary 15412
{'pranav': 5412}
Enter name 2yhuJ
Enter salary 212563
{'pranav': 5412, 'yhuJ': 12563}
[('pranav', 5412), ('yhuJ', 12563)]
sum=17975
max=12563
min=5412
avg=8987
```

In [15]:  *#Add name and salary {name:salary} for n number of employees through keyboard in a d*

```
import operator
n=int(input("Enter no of records"))
d={}
for i in range(1,n+1):
    name= input("Enter name %d "%(i))
    sal=int(input("Enter salary %d "%(i)))
    if (sal >2000 and sal< 4000):
        d[name]=sal
print(d)
```

```
Enter no of records2
Enter name 1 pk
Enter salary 1 2540
Enter name 2 hnn
Enter salary 2 4025
{'pk': 2540}
```

```

In [8]: ▶ #Python program to convert a 3 digit number into words
def convert_to_words(num):
    l = len(num);
    if (l == 0):
        print("empty string");
        return;

    if (l > 4):
        print("Length more than 4 is not supported");
        return;
    single_digits = ["zero", "one", "two", "three",
                     "four", "five", "six", "seven",
                     "eight", "nine"];
    two_digits = ["", "ten", "eleven", "twelve",
                  "thirteen", "fourteen", "fifteen",
                  "sixteen", "seventeen", "eighteen",
                  "nineteen"];
    tens_multiple = ["", "", "twenty", "thirty", "forty",
                     "fifty", "sixty", "seventy", "eighty",
                     "ninety"];
    tens_power = ["hundred", "thousand"];
    print(num, ":", end = " ");
    if (l == 1):
        print(single_digits[ord(num[0]) - '0']);
        return;
    x = 0;
    while (x < len(num)):
        if (l >= 3):
            if (ord(num[x]) - 48 != 0):
                print(single_digits[ord(num[x]) - 48],
                      end = " ");
                print(tens_power[l - 3], end = " ");

                l -= 1;
            else:
                if (ord(num[x]) - 48 == 1):
                    sum = (ord(num[x]) - 48 +
                           ord(num[x + 1]) - 48);
                    print(two_digits[sum]);
                    return;
                elif (ord(num[x]) - 48 == 2 and
                      ord(num[x + 1]) - 48 == 0):
                    print("twenty");
                    return;
                else:
                    i = ord(num[x]) - 48;
                    if(i > 0):
                        print(tens_multiple[i], end = " ");
                    else:
                        print("", end = "");
                    x += 1;
                    if(ord(num[x]) - 48 != 0):
                        print(single_digits[ord(num[x]) - 48]);
                x += 1;
    convert_to_words("221");
    convert_to_words("159");

```

221 : two hundred twenty one
159 : one hundred fifty nine

FILES

```
In [9]: ▶ #Python Program to count the total number of charaters (except blank space) in a text file  
input_file = input("Enter File name : ")  
file_txt = open(input_file)  
text = file_txt.read()  
charc = 0  
for i in text:  
    if(i != " " and i != "\n" ):  
        charc += 1  
  
print ("total num of characters: ",charc);
```

Enter File name : test.py
total num of characters: 19

```
In [11]: ▶ #Python Program to print all the numbers present in a text file with its total number  
  
input_file = input("Enter File name : ")  
file_txt = open(input_file)  
text = file_txt.read()  
w = []  
d = dict()  
for line in text:  
    line = line.strip()  
    if(line.isdigit()):  
        w.append(line)  
for j in w:  
    if j in d:  
        d[j] = d[j] + 1  
    else:  
        d[j] = 1  
for key in list(d.keys()):  
    print(key, ":", d[key])
```

Enter File name : test.py
9 : 1
8 : 2
7 : 3
6 : 2
3 : 1
1 : 2
2 : 2
5 : 3
4 : 3

```
In [12]: ▶ #Python Program to append the contents of one file to another file by getting the contents of one file  
name1 = input("Enter file to be read from: ")  
name2 = input("Enter file to be appended to: ")  
fin = open(name1, "r")  
data2 = fin.read()  
fin.close()  
fout = open(name2, "a")  
fout.write(data2)  
fout.close()
```

Enter file to be read from: test.py
Enter file to be appended to: pk.txt

In [13]: ▶ *#Python Program to count the number of blank spaces in a text file.*

```
fname = input("Enter file name: ")
k = 0

with open(fname, 'r') as f:
    for line in f:
        words = line.split()
        for i in words:
            for letter in i:
                if(letter.isspace()):
                    k=k+1
print("Occurrences of blank spaces:")
print(k)
```

Enter file name: test.py
Occurrences of blank spaces:
38

In [14]: ▶ *#Python Program to read a file and capitalize the first letter of every word in the*

```
fname = input("Enter file name: ")
with open(fname, 'r') as f:
    with open("out.txt", "w") as f1:
        for line in f:
            l=line.title()
            f1.write(l)
file2=open("out.txt", 'r')
line=file2.readline()
while(line!=""):
    print(line)
    line=file2.readline()
file2.close()
```

Enter file name: test.py
Print("Hello World")

9876312154855426477