```
In [1]:
            #Add rollno and marks {name:mark} for n number of students through keyboard
          2 import operator
          3 | n=int(input("Enter no of records"))
          4 d={}
          5
            for i in range(1,n+1):
                 name= input("Enter name %d"%(i))
          6
          7
                 mark=int(input("Enter mark %d"%(i)))
          8
                 d[name]=mark
          9
                 print(d)
         10
            sorted_a= sorted(d.items(), key=operator.itemgetter(0),reverse=True)
             print(sorted a)
         11
        Enter no of records2
```

```
Enter no of records2
Enter name 1Nachi
Enter mark 1100
{'Nachi': 100}
Enter name 2Pranav
Enter mark 2100
{'Nachi': 100, 'Pranav': 100}
[('Pranav', 100), ('Nachi', 100)]
```

In [3]: #Add name and salary {name:salary} for n number of employees through keyboar 2 import operator 3 n=int(input("Enter no of records")) 5 d={} 6 for i in range(1,n+1): 7 name= input("Enter name %d"%(i)) mark=int(input("Enter salary %d"%(i))) 8 9 d[name]=mark 10 print(d) sorted a= sorted(d.items(), key=operator.itemgetter(∅),reverse=False) 11 print(sorted a)

```
Enter no of records2
Enter name 1Nachi
Enter salary 1500000
{'Nachi': 500000}
Enter name 2Pranav
Enter salary 2500000
{'Nachi': 500000, 'Pranav': 500000}
[('Nachi', 500000), ('Pranav', 500000)]
```

```
In [4]:
            #Add name and salary {name:salary} for n number of employees through keyboar
          2
          3
            import operator
            n=int(input("Enter no of records"))
          4
          5
            for i in range(1,n+1):
          6
          7
                 name= input("Enter name %d"%(i))
          8
                 mark=int(input("Enter salary %d"%(i)))
          9
                 d[name]=mark
                 print(d)
         10
            sorted_a= sorted(d.items(), key=operator.itemgetter(1),reverse=False)
         11
            print(sorted_a)
         12
         13 print("max=%d"%sum(d.values()))
            print("max=%d"%max(d.values()))
            print("min=%d"%min(d.values()))
         16 print("avg=%d"%(sum(d.values())/2))
        Enter no of records2
        Enter name 1Nachi
        Enter salary 1500000
        {'Nachi': 500000}
        Enter name 2Pranav
        Enter salary 2500000
        {'Nachi': 500000, 'Pranav': 500000}
```

```
[('Nachi', 500000), ('Pranav', 500000)]
max=1000000
max=500000
min=500000
avg=500000
```

```
In [5]:
            #Add name and salary {name:salary} for n number of employees through keyboar
          2 import operator
          3 n=int(input("Enter no of records"))
            d={}
             for i in range(1,n+1):
          5
                 name= input("Enter name %d"%(i))
          6
          7
                 sal=int(input("Enter salary %d"%(i)))
          8
                 if (sal >2000 and sal< 4000):</pre>
          9
                    d[name]=sal
         10 print(d)
```

```
Enter no of records2
Enter name 1Nachi
Enter salary 1500000
Enter name 2Pranv
Enter salary 2500000
{}
```

```
In [7]:
            #Python program to convert a 3 digit number into words
          2
            def convert_to_words(num):
          3
                l = len(num);
                if (1 == 0):
          4
          5
                    print("empty string");
          6
                    return;
          7
          8
                if (1 > 4):
          9
                    print("Length more than 4 is not supported");
         10
                single_digits = ["zero", "one", "two", "three",
         11
                                 "four", "five", "six", "seven",
         12
                                 "eight", "nine"];
         13
                14
         15
                               "sixteen", "seventeen", "eighteen",
         16
         17
                               "nineteen"];
                18
         19
                                 "ninety"];
         20
                tens_power = ["hundred", "thousand"];
print(num, ":", end = " ");
         21
         22
         23
                if (1 == 1):
         24
                    print(single_digits[ord(num[0]) - '0']);
         25
                x = 0;
         26
                while (x < len(num)):</pre>
         27
         28
                    if (1 >= 3):
         29
                        if (ord(num[x]) - 48 != 0):
         30
                             print(single digits[ord(num[x]) - 48],
                                                       end = " ");
         31
                             print(tens_power[1 - 3], end = " ");
         32
         33
                        1 -= 1;
         34
                    else:
         35
                        if (ord(num[x]) - 48 == 1):
         36
                             sum = (ord(num[x]) - 48 +
         37
         38
                                    ord(num[x]) - 48);
         39
                             print(two_digits[sum]);
         40
                            return;
                        elif (ord(num[x]) - 48 == 2 and
         41
                              ord(num[x + 1]) - 48 == 0):
         42
         43
                             print("twenty");
         44
                            return;
         45
                        else:
         46
                             i = ord(num[x]) - 48;
                             if(i > 0):
         47
                                print(tens_multiple[i], end = " ");
         48
         49
                            else:
                                print("", end = "");
         50
         51
                            x += 1;
         52
                             if(ord(num[x]) - 48 != 0):
                                print(single_digits[ord(num[x]) - 48]);
         53
         54
                    x += 1;
         55
            convert_to_words("523");
         56
            convert_to_words("898");
```

523 : five hundred twenty three
898 : eight hundred ninety eight

```
In [11]:
             #python Program to count the total number of charaters (except blank space)
             input_file = input("Enter File name : ")
           3 file txt = open(input file)
           4 text = file_txt.read()
             charc = 0
           5
           6
              for i in text:
                  if(i != " " and i != "\n" ):
           7
           8
                       charc += 1
           9
             print ("total num of characters: ",charc);
          10
```

Enter File name : Day1_Assignment1_Exercise1.ipynb
total num of characters: 1553

```
In [12]:
             #ython Program to print all the numbers present in a text file with its tota
           2 input_file = input("Enter File name : ")
           3 file txt = open(input file)
           4 text = file_txt.read()
           5
             w = []
           6
              d = dict()
              for line in text:
           7
           8
                  line = line.strip()
           9
                  if(line.isdigit()):
          10
                         w.append(line)
          11
              for j in w:
          12
                    if j in d:
          13
                      d[j] = d[j] + 1
          14
                    else:
          15
                          d[j] = 1
              for key in list(d.keys()):
          16
          17
                  print(key, ":", d[key])
```

Enter File name : Day1_Assignment1_Exercise1.ipynb
1 : 7
4 : 7
0 : 11
2 : 9
9 : 1
5 : 1
3 : 7
8 : 1

Enter file to be read from: Day1_Assignment1_Exercise1.ipynb Enter file to be appended to: Day1_Session2_Exercise2.ipynb

```
In [14]:
              #Python Program to count the number of blank spaces in a text file.
           2 fname = input("Enter file name: ")
           3
              k = 0
           4
           5
              with open(fname, 'r') as f:
                  for line in f:
           6
           7
                      words = line.split()
           8
                      for i in words:
                          for letter in i:
           9
          10
                              if(letter.isspace):
                                  k=k+1
          11
             print("Occurrences of blank spaces:")
          12
          13
             print(k)
```

Enter file name: Day1_Assignment1_Exercise1.ipynb
Occurrences of blank spaces:
1553

```
In [15]:
             #Python Program to read a file and capitalize the first letter of every word
             fname = input("Enter file name: ")
           3
             with open(fname, 'r') as f:
           4
               with open("out.txt", "w") as f1:
           5
           6
                  for line in f:
           7
                      l=line.title()
                      f1.write(1)
           8
             file2=open("out.txt",'r')
           9
          10 line=file2.readline()
          11
             while(line!=""):
          12
                  print(line)
                  line=file2.readline()
          13
          14 file2.close()
         Enter file name: Day1_Assignment1_Exercise1.ipynb
          "Cells": [
           {
            "Cell_Type": "Code",
            "Execution Count": 14,
            "Metadata": {},
            "Outputs": [
             {
              "Name": "Stdout",
              "A L T " "CL
 In [ ]:
```