In [1]:
```
                                        #EXERCISE TESTS
#1. Add rollno and marks {name:mark} for n number of students through keybo
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 records3
Enter name 1ravi
Enter mark 145
{'ravi': 45}
Enter name 2vinod
Enter mark 256
{'ravi': 45, 'vinod': 56}
Enter name 3binod
Enter mark 370
{'ravi': 45, 'vinod': 56, 'binod': 70}
[('vinod', 56), ('ravi', 45), ('binod', 70)]
```

In [2]:
```
#2. Add name and salary {name:salary} for n number of employees through key
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 1ravi
Enter salary 160000
{'ravi': 60000}
Enter name 2binod
Enter salary 290000
{'ravi': 60000, 'binod': 90000}
[('binod', 90000), ('ravi', 60000)]
```

In [ ]:
```
#3. Add name and salary {name:salary} for n number of employees through key
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("max=%d"%sum(d.values()))
print("max=%d"%max(d.values()))
print("min=%d"%min(d.values()))
print("avg=%d"%(sum(d.values())/2))
```

In [3]:
```
#4. Add name and salary {name:salary} for n number of employees through key
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 1binod
Enter salary 16000
Enter name 2ravi4444
Enter salary 244444
{}
```

In [4]:

```
#5. 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]) - 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("523");
convert_to_words("898");
```

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

In [6]:

```
                                                    #FILES EXERCISE
#Python Program to count the total number of charaters (except blank space)
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 : examples.desktop
total num of characters:  6430
```

In [7]:

```
#Python Program to print all the numbers present in a text file with its to
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 : examples.desktop
1 : 1
0 : 1
```

In [9]:

```
#Python Program to append the contents of one file to another file by getti
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: examples.desktop
Enter file to be appended to: examples.desktop
```

In [10]:

```
#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: examples.desktop
Occurrences of blank spaces:
25720
```

In [16]:

```
#Python Program to read a file and capitalize the first letter of every wor
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: hello.txt
Hello Planet
```

In [ ]:

```

```