

2. leap year

```
start = int(input("enter start"))
end = int(input("end year"))
print("leap years")
for year in range(start,end):
    if(year % 4 == 0) and (year % 100 != 0) or (year %400 == 0):
        print (year)
```

3.a.generate positive list of number from a given list of numbers

```
l=[-2,5,-6,7,3,-9]
#b=[]
for i in l:
    if i <= 0:
        print(i)
```

3.b.square of N numbers

```
a=[]
n=int(input("size"))
print("enter list elements")
for i in range(0,n):
    a.append(int(input()))
r=[i*i for i in a]
print(r)
```

3.c.

3.d.

4.count the occurrences of each word in a line of text

```
import string

# Open the file in read mode
text = open("sample.txt", "r")

# Create an empty dictionary
d = dict()

# Loop through each line of the file
for line in text:
    # Remove the leading spaces and newline character
    line = line.strip()

    # Convert the characters in line to
    # lowercase to avoid case mismatch
    line = line.lower()

    # Remove the punctuation marks from the line
    line = line.translate(line.maketrans("", "", string.punctuation))

    # Split the line into words
    words = line.split(" ")

    # Iterate over each word in line
    for word in words:
        # Check if the word is already in dictionary
        if word in d:
            # Increment count of word by 1
            d[word] = d[word] + 1
        else:
            # Add the word to dictionary with count 1
            d[word] = 1

# Print the contents of dictionary
for key in list(d.keys()):
    print(key, " ", d[key])
```

5.prompt the user for a list of integers. For all values greater than 100, store 'over' instead.

```
l=[]
n=int(input("size"))
print("enter element")
for i in range(0,n):
    l.append(int(input()))
for i in range(0,n):
    if l[i] > 100 : l[i] = 'over'
print(l[:])
```