In [4]:

```python
with open("DataFiles/sample.txt",'w') as f:
    k = input("Enter some text here:")
    f.write(k)
```

Enter some text here:Hi Good morning to All...

In [10]:

```python
with open("DataFiles/sample.txt","r")as fr:
    print(fr.read())
```

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In [9]:

```python
with open("DataFiles/sample1.txt","a")as fa:
    l = input()
    fa.write(l)
```

in Vemu College

In [ ]:

```python
input.txt:
    3
    34 55 2
output.txt:
    Even numbers are: 2,34
```

In [35]:

```python
with open("DataFiles/input.txt","w") as h:
    l = input()
    h.write(l)
    h.write("\n")
    k = []
    for i in range(1,int(l)+1):
        m = int(input())
        k.append(m)
    for j in range(len(k)):
        h.write(str(k[j])+" ")
```

5
23
34
12
3
45

In [36]:

```python
with open("DataFiles/input.txt","r") as g:
    j=g.readlines()
    k = j[1].split()
    with open("DataFiles/output.txt","w") as hh:
        hh.write("Even numbers are: ")
        for i in range(len(k)):
            if int(k[i])%2==0:
                m = k[i]+" "
                hh.write(m)
```

Hackerrank Problem on list:

In [40]:

```python
n = int(input())
l = []
for i in range(1,n+1):
    m = input().split()
    if len(m)==1:
        if m[0] == "print":
            print(l)
        elif m[0] == "sort":
            l.sort()
        elif m[0] == "pop":
            l.pop()
        else:
            l.reverse()
    else:
        if len(m)==2:
            if m[0] == "remove":
                l.remove(int(m[1]))
            elif m[0] == "append":
                l.append(int(m[1]))
        else:
            if m[0] == "insert":
                l.insert(int(m[1]),int(m[2]))
```

```
12
insert 0 5
insert 1 10
insert 0 6
print
[6, 5, 10]
remove 6
append 9
append 1
sort
print
[1, 5, 9, 10]
reverse
print
[10, 9, 5, 1]
remove 10
```

Map

- To change the data type values in a list,tuple,set or string

Syntax:

```
map(functionname,iterator)
```

In [50]:

```python
k = input().split()
p = []
for i in range(len(k)):
    p.append(int(k[i]))
print(p)
```

```
6 7 6 5 4
[6, 7, 6, 5, 4]
```

In [51]:

```python
l = list(map(int,input().split()))
print(l)
p = list(map(str,l))
print(p)
```

```
2 3 4 5 6
[2, 3, 4, 5, 6]
['2', '3', '4', '5', '6']
```

In [67]:

```python
def evn(d):
    if d%2==0:
        return d
    return 0

l = list(map(int,input().split()))
mm = list(map(evn,l))
print(mm)
```

23 4 35 6 8 90 99
[0, 4, 0, 6, 8, 90, 0]

In [60]:

```python
def ev(l):
    if l%2==0:
        return l
    else:
        return -1
```

In [61]:

```python
m =[2,3,5,4]
k = list(map(ev,m))
print(k)
```

[2, -1, -1, 4]

In [157]:

```python
def Prime(k):
    f = 0
    for i in range(1,k+1):
        if k%i==0:
            f+=1
    if f==2:
        return True
    else:
        return -1
```

```
1  Prime(7)
```

7

```
1  p = [1,10,2,4,6,78,9,11,5,17]
2  o = list(map(Prime,p))
3  print(o)
```

[-1, -1, 2, -1, -1, -1, -1, 11, 5, 17]

Anonymous Function:

```
- Lambda variables:expression
- We are not using def keyword to create a function
```

```
1  m =lambda a,b:[a+b,a-b,a*b]
2  m(1,3)
```

[4, -2, 3]

Comprehensions:

In [120]:

```
1  l = [2,3,5,6,8,9,0]
2  for i in l:
3      if i%2==0:
4          print(i,end=" ")
```

2 6 8 0

In [143]:

```
1  # k = [2,3,1,2,4,7]
2  l = [i for i in map(int,input().split()) if i%2==0]
3  print(l)
```

3 4 5 6
[4, 6]

In [158]:

```
1  l=list(map(int,input().split()))
2  ll = list(filter(lambda i:(Prime(i)==True),l))
3  print(ll)
```

2 3 4 5 6 7
[2, 3, 5, 7]

Iterator:

    iter()
    next()

In [167]:

```python
s = 'Python'
k = iter(s)
print(k.__next__())
print(k.__next__())
```

P
y

In [170]:

```python
s = "Hello"
k = iter(s)
for i in k:
    print(i)
```

H
e
l
l
o

In [ ]:

```python

```

In [ ]:

```python

```