

```
In [1]: import numpy as np
```

```
In [2]: a=np.ones((3,3),dtype=int)
print(a)
```

```
In [3]: b=np.array([1,2,3,4])
for i in b:
    print(i)
```

```
1
2
3
4
```

```
In [40]: import collections as cl
c=np.array([1,2,3,1,3,4,5,6,3,6,3])
x=cl.Counter(c)
print(x)

Counter({3: 4, 1: 2, 6: 2, 2: 1, 4: 1, 5: 1})
```

```
In [37]: k=int(input('Enter'))
g=np.count_nonzero(c==k)
print(g)

Enter2
1
```

```
In [41]: for a , b in x.items() :
        if b<4:
            print(a)

1
2
4
5
6
```

```
In [26]: v={}
for i in c:
    if i not in v:
        v[i]=1
    else:
        v[i]+=1
print(v)

{1: 2, 2: 1, 3: 4, 4: 1, 5: 1, 6: 2}
```

```
In [34]: x=cl.Counter(c<4)
print(x)

Counter({True: 7, False: 4})
```

```
In [ ]: x=np.min(c)
print(x)
```

```
In [ ]: y=np.max(c)
print(y)
```

```
In [5]: h=int(input('Size'))
l=np.zeros(h,dtype=int)
for i in range(h):
    c=int(input('Value'))
    l[i]=c
print(l)
```

```
Size2
Value1
Value2
[1 2]
```

```
In [6]: n=np.array([1,2,1,3,4,5,])
```

```
In [7]: v={}
for i in n:
    if i not in v:
        v[i]=1
    else:
        v[i]+=1
print(v)
```

```
{1: 2, 2: 1, 3: 1, 4: 1, 5: 1}
```

```
In [8]: x=np.array([1,2,3,4,5,3,2,14,5,3])
for i in range(4):
    y=int(input('value'))
    j=y in x
    print(j)
```

```
value1
True
value2
True
value13
False
value1
True
```

```
In [13]: n=int(input())
          for i in range(1,n+1):
              for j in range(1,11):
                  print(i,'*',j,'=',i*j)
              print('-----')
```

```
10
1 * 1 = 1
1 * 2 = 2
1 * 3 = 3
1 * 4 = 4
1 * 5 = 5
1 * 6 = 6
1 * 7 = 7
1 * 8 = 8
1 * 9 = 9
1 * 10 = 10
```

```
-----
2 * 1 = 2
2 * 2 = 4
2 * 3 = 6
2 * 4 = 8
2 * 5 = 10
2 * 6 = 12
2 * 7 = 14
2 * 8 = 16
2 * 9 = 18
2 * 10 = 20
```

```
In [ ]:
```