

## # Karanjot Singh

In [18]:

```
l = [5,3,77,88,23,43,56,23,75,99]
print(l[:3])
i = 10
print(id(l), "\n")
for i in l:
    print(id(i))
```

```
[5, 88, 56, 99]
2092560406728
```

```
140725199675920
140725199675856
140725199678224
140725199678576
140725199676496
140725199677136
140725199677552
140725199676496
140725199678160
140725199678928
```

In [35]:

```
l = []
l.append(input())
print(l)
l.extend([2,1,4,3,5,3, 'jgybgh'])
print(l)
l.extend("Karan")
print(l)
l.insert(3,22)
print(l)
```

```
uhygt
['uhygt']
['uhygt', 2, 1, 4, 3, 5, 3, 'jgybgh']
['uhygt', 2, 1, 4, 3, 5, 3, 'jgybgh', 'K', 'a', 'r', 'a', 'n']
['uhygt', 2, 1, 22, 4, 3, 5, 3, 'jgybgh', 'K', 'a', 'r', 'a', 'n']
```

In [38]:

```
l = [2,3,4,5,6]
for i in range(len(l)):
    l[i] = l[i]**2
print(l)
```

```
[4, 9, 16, 25, 36]
```

In [39]:

```
n = 15
l = []
for i in range(0,n):
    l.append(int(input()))
print(l)
```

```
1
2
3
4
5
6
7
8
9
12
13
14
15
16
17
[1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14, 15, 16, 17]
```

In [72]:

```

l = []
ind = []
count = 0
lgh = int(input("Enter the Length Of list:"))
for i in range(0,lgh):
    l.append(int(input()))
c = 1
find = int(input("Enter the Number You want to find:"))
if find in l:
    for i in l:
        if i == find:
            count += 1
            ind.append(c.index(i))
            c.remove(i)
            if count > 1:
                ind[1:] = [x+1 for x in ind[1:]]
    #print(ind)
    if count > 1:
        print("The Element is present More Than One Time At Positions:",[x+1 for x in ind])
    else:
        print("The Element is present in list At {} Position:".format(l.index(find)+1))
else:
    print("Element Is not present in list!!!!")

```

Enter the Length Of list:6

1  
2  
3  
4  
5  
1

Enter the Number You want to find:1

The Element is present More Than One Time At Positions: [1, 6]

In [58]:

```

array = [[1,3,5],[1,4,6],[7,6,9]]
Sum = 0
for i in range(0,len(array)):
    Sum = Sum + array[i][i]
print(Sum)

```

14

In [65]:

```

mat1 = [[1,3,5],[2,4,6],[2,5,8]]
mat2 = [[9,8,3],[5,7,2],[8,2,5]]
mat3 = [[0,0,0],[0,0,0],[0,0,0]]
for i in range(0,len(mat1)):
    for j in range(0,len(mat1[i])):
        mat3[i][j] = mat1[i][j]+mat2[i][j]
print(mat3)

```

[[10, 11, 8], [7, 11, 8], [10, 7, 13]]

In [67]:

```
mat1 = [[1,3,5],[2,4,6],[2,5,8]]
transpose_mat=[[0,0,0],[0,0,0],[0,0,0]]
for i in range(0,len(mat1)):
    for j in range(0,len(mat1[i])):
        transpose_mat[j][i] = mat1[i][j]
print(transpose_mat)
```

```
[[1, 2, 2], [3, 4, 5], [5, 6, 8]]
```

In [71]:

```
mat1 = [[1,3,5],[2,4,6],[2,5,8]]
mat2 = [[9,8,3],[5,7,2],[8,2,5]]
mat3 = [[0,0,0],[0,0,0],[0,0,0]]
for i in range(0,len(mat1)):
    for j in range(0,len(mat1[i])):
        for k in range(len(mat1[i])):
            mat3[i][j] += mat1[i][k]*mat2[k][j]
for i in mat3:
    print(i)
```

```
[64, 39, 34]
[86, 56, 44]
[107, 67, 56]
```

In [ ]: