

In [3]:

```

n = int(input())
a = []
for i in range(n):
    row = input().split()
    print(row)
    for i in range(len(row)):
        row[i]=int(row[i])
    a.append(row)
print(a)

```

```

5
2 4 1 7 6
['2', '4', '1', '7', '6']
54 65 88 223 54
['54', '65', '88', '223', '54']
244
['244']
44543 3 33 2 1 567 7
['44543', '3', '33', '2', '1', '567', '7']
65 4 4 3 1123 445 6 6 7
['65', '4', '4', '3', '1123', '445', '6', '6', '7']
[[2, 4, 1, 7, 6], [54, 65, 88, 223, 54], [244], [44543, 3, 33, 2, 1, 567,
7], [65, 4, 4, 3, 1123, 445, 6, 6, 7]]

```

In [5]:

```

l = [2,4,6,8,10]
a = 1
l.append(20)
print(l)
print(a)
print(a == 1)

```

```

[2, 4, 6, 8, 10, 20]
[2, 4, 6, 8, 10, 20]
True

```

In [32]:

```

t = ()
print(type(t))
x = 1,2,3
print(type(x))
t = ('ab','cd')
print(t)
t2 = tuple()
print(t2)
print(type(t2))
t2 = tuple("Hello")
print(t2)
t2 = tuple(range(6,9))
print(t2)
l = list(t2)
print(type(l))
print(t2)
t2 = tuple([x*2 for x in range(5)])
print(t2)
t = 1,2,8
t = 2
print(type(t))
t = (2)
print(type(t))
t = (2,)
print(type(t))
t = 2,
print(type(t))
t1 = 1,3,5
t2 = 2,4,6
t3 = (t1,t2)
print(t3)
a,b = 2,5
a,b = b,a
print(a," ",b)
a,b,c = ('one','two','three')
print(a," ",b," ",c)
t,t1,t2 = ((1,3,5),('a','b'),('as",2,13))
print(t," ",t1," ",t2)
t = (2,4,6,7,1,3,5,8,9)
print(t)
print(max(t))
print(min(t))
print(sum(t))

```

```

<class 'tuple'>
<class 'tuple'>
('ab', 'cd')
()
<class 'tuple'>
('H', 'e', 'l', 'l', 'o')
(6, 7, 8)
<class 'list'>
(6, 7, 8)
(0, 2, 4, 6, 8)
<class 'int'>
<class 'int'>
<class 'tuple'>
<class 'tuple'>

```

```

((1, 3, 5), (2, 4, 6))
5      2
one    two    three
(1, 3, 5) ('a', 'b') ('as', 2, 13)
(2, 4, 6, 7, 1, 3, 5, 8, 9)
9
1
45

```

In [43]:

```

num = int(input("Enter the Number :"))
alp = ("Zero","One","Two","Three","Four","Five","Six","Seven","Eight","Nine")
inp = [int(x) for x in str(num)]
#print(inp)
for j in range(len(inp)):
    for k in range(0,10):
        if inp[j] == k:
            print(k,"=",alp[k])

```

Enter the Number :44444

```

4 = Four
4 = Four
4 = Four
4 = Four
4 = Four

```

## # Sets

In [52]:

```

s = {1,9,7,8}
print(s)
s2 = {}
print(type(s2))
s2 = set([1,3,5,7,8,2])
print(s2)
s2 = set("Hello")
print(s2)
s2.add(10)
print(s2)
s2.update([1,2,3],[4,5,6],[7,8,9])
print(s2)
s2.discard(29)
#s2.remove(29)
s2.pop()

```

```

{8, 1, 9, 7}
<class 'dict'>
{1, 2, 3, 5, 7, 8}
{'H', 'l', 'o', 'e'}
{'o', 'e', 10, 'l', 'H'}
{1, 2, 3, 4, 'o', 'e', 5, 6, 7, 10, 8, 9, 'l', 'H'}

```

Out[52]:

1

In [66]:

```
a = {2,3,4,5,6,7}
b = {1,2,3,4,5,6,8,9,7}
print("---Union---")
print(a | b)
print(a.union(b))
print("---Intersection---")
print(a & b)
print(a.intersection(b))
print("---Set Difference---")
print(a - b)
print(a ^ b)
print(a.symmetric_difference(b))
print(a.issubset(b))
print(a.issuperset(b))
print(b.issubset(a))
print(b.issuperset(a))
```

```
---Union---
{1, 2, 3, 4, 5, 6, 7, 8, 9}
{1, 2, 3, 4, 5, 6, 7, 8, 9}
---Intersection---
{2, 3, 4, 5, 6, 7}
{2, 3, 4, 5, 6, 7}
---Set Difference---
{1, 2, 3, 4, 5, 6, 7, 8, 9}
{1, 8, 9}
{1, 8, 9}
True
False
False
True
```

In [ ]: