



## Using Mathematical operators for List Objects:

We can use + and \* operators for List objects.

### 1. Concatenation operator(+):

We can use + to concatenate 2 lists into a single list

```
1) a=[10,20,30]
2) b=[40,50,60]
3) c=a+b
4) print(c) ==>[10,20,30,40,50,60]
```

**Note:** To use + operator compulsory both arguments should be list objects, otherwise we will get TypeError.

**Eg:**

```
c=a+40      ==>TypeError: can only concatenate list (not "int") to list
c=a+[40]    ==>valid
```

### 2. Repetition Operator(\*):

We can use repetition operator \* to repeat elements of list specified number of times

**Eg:**

```
1) x=[10,20,30]
2) y=x*3
3) print(y) ==>[10,20,30,10,20,30,10,20,30]
```

## Comparing List objects

We can use comparison operators for List objects.

**Eg:**

```
1. x=["Dog","Cat","Rat"]
2. y=["Dog","Cat","Rat"]
3. z=["DOG","CAT","RAT"]
4. print(x==y) True
5. print(x==z) False
6. print(x != z) True
```