Classes in Python

In [6]:

```python
class Point:
    def move(self): ## Reference to current Object. Same as 'this' keyword
        print("move")
    def draw(self):
        print("draw")
point1=Point() ## Specifies the object of a class
point1.move()
point1.draw()
point1.x=10   ## x and y are attributes. We can set them anywhere in the program
point1.y=20
point1.a=90
print(point1.a)
```

```
move
draw
90
```

In [5]:

```python
point2=Point() ## Another Object for Point Class
point2.x=40
print(point2.x)
```

```
40
```

Constructors

In [1]:

```python
class Point:
    def __init__(self,x,y): ## Using this 'init' method we can initialize the objects a
nd
        self.x=x            ## this method is known as constructor 'def __init__(self)=
Constructor'
        self.y=y
    def move(self): ## Reference to current Object. Same as 'this' keyword
        print("move")
    def draw(self):
        print("draw")
point=Point(10,20) ## Specifies the object of a class
print(point.y)
```

```
20
```

In [8]:

```python
class Person:
    def __init__(self,name):
        self.name=name
    def talk(self):
        print(f'Hi I am {self.name}')
obj1=Person("Sandhya")
obj2=Person("Prabhu")
obj1.talk()
obj2.talk()
```

```
Hi I am Sandhya
Hi I am Prabhu
```

Inheritance

In [13]:

```python
class Mammal:
    def walk(self):
        print("walk")
class Dog(Mammal):
    pass           ## Python doesn't accept an empty class. So, we mention 'pass' here
class Cat(Mammal):
    def meow(self):
        print("Meow")
cat_obj=Cat()
cat_obj.meow()
cat_obj.walk()
```

```
Meow
walk
```

Modules

A Module in python is some file with python code

Used to organise code in Multiple Files. Example: Same like different sections in Shopping Marts

In [14]:

```python
def lbs_to_kg(weight):
    return weight*0.45
def kg_to_lbs(weight):
    return weight//0.45
## We will save the above code in one python file(ex:someex.py). To use these methods w
e will write the following code
## in the other python file where we need

## import someex
## someex.lbs_to_kg(30)
## someex.kg_to_lbs(40)

## In this way we can use Modules.

## If we want only particular functions from a module? Then use the following

## import someex
## from someex import lbs_to_kg
## lbs_to_kg(80)
```

Find the largest number in the list

In [15]:

```python
nums=[1,3,10,80,0]
print(max(nums))
```

80

In [16]:

```python
max=0
for number in nums:
    if number>max:
        max=number
print(max)
```

80

In [ ]: