In [14]:
```
#Python program to find volume and surface area of Cylinder (V=pi*r*r*h, SA=
#using class and objects. Create a constructor to initialize the objects and
#with 2 decimal points precision.( Finding Vol and SA using class and object
import math
class Cylinder():
    def __init__(self,radius,height):
        self.radius=radius
        self.height=height
    def volume(self):
        return math.pi*self.radius*self.radius*self.height
    def surface_area(self):
        return math.pi*2*r*h
radius,height=[int(x) for x in input("Enter a two value: ").split()]
obj=Cylinder(radius,height)
print("Area of Cylinder:",round(obj.volume(),2))
print("Perimeter of circle:",round(obj.surface_area(),2))
```

```
Enter a two value: 5 10
Area of Cylinder: 785.4
Perimeter of circle: 314.16
```

In [19]:
```
#Create a class Student with constructor, setdata() and dispdata() for encap
#rollno, name, mark1, mark2 into it. Create three objects obj1, obj2, obj3 f
#Student. Set rollno, name, mark1, mark2 for 3 students using setdata() and
#them using dispdata().
#(simple class and object with constructor)
class Student:
    stdCount=0
    def __init__(self,r,n,m1,m2):
        self.r=r
        self.n=n
        self.m1=m1
        self.m2=m2
        Student.stdCount += 1
    def setdata(self):
        print("Total Students %d" % Student.stdCount)
    def dispdata(self):
        print("Roll_No :",self.r,",Name :",self.n,",Marks1 :",self.m1,",Mark
obj1 = Student(1001,"Nachi",100,100)
obj2 = Student(1002,"Pranav",100,100)
obj3 = Student(1003,"Ravi",100,100)

obj1.dispdata()
obj1.dispdata()
obj1.dispdata()
print("Total Students %d" % Student.stdCount)
```

```
Roll_No : 1001 ,Name : Nachi ,Marks1 : 100 ,Marks2 : 100
Roll_No : 1001 ,Name : Nachi ,Marks1 : 100 ,Marks2 : 100
Roll_No : 1001 ,Name : Nachi ,Marks1 : 100 ,Marks2 : 100
Total Students 3
```

In [41]:
```
#Create a parent class Person with constructor(name, idnumber), display() to
#name and idnumber and child class Employee with constructor(name, idnumber
#salary, post) and display() to display name, idnumber, salary and post. Cre
#from parent to pass name and idnumber as parameter and display them. Create
#objects a and b of Employee to pass name, idnumber, salary and post and dis
#them (single inheritance)
class Person:
    def __init__(self,name,idnumber):
        self.name=name
        self.idnumber=idnumber
    def display(self):
        print("Name: %s "%self.name)
        print("IdNumber: %d"%self.idnumber)
class Employee(Person):
    def __init__(self):
        self.salary=salary
        self.post=post
        Person.__init__(self,salary,post)
    def display():
        print("Name: %s"%self.name)
        print("IdNumber: %d"%self.idnumber)
x = Person("Nachi",1001)
print(x.display())
a=Employee(500000,"HR")
print(a.display())
```

```
Name: Nachi
IdNumber: 1001
None


---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-41-2855e95652b1> in <module>
     22 x = Person("Nachi",1001)
     23 print(x.display())
---> 24 a=Employee(500000,"HR")
     25 print(a.display())
     26

TypeError: __init__() takes 1 positional argument but 3 were given
```

In [ ]:
```

```