In [18]:
```
#Python program to find volume and surface area of Cylinder (V=pi*r*r*h, SA
import math
class cylinder():
    def __init__(self,radius):
        self.radius=radius
    def volume(self):
        return math.pi*((self.radius**2)*h)
    def surface(self):
        return (2*math.pi*(self.radius*h)+(math.pi*self.radius**2))
r=float(int(input("Enter the radius of cylinder : ")))
h=float(int(input("Enter the height of cylinder : ")))
obj=cylinder(r)
obj=cylinder(h)
print("volume of cylinder:",(obj.volume()))
print("surface area of cylinder:",(obj.surface()))
```

```
Enter the radius of cylinder : 5
Enter the height of cylinder : 6
volume of cylinder: 678.5840131753953
surface area of cylinder: 339.29200658769764
```

In [33]:
```
#Create a class Student with constructor, setdata() and dispdata() for enca
#rollno, name, mark1, mark2 into it. Create three objects obj1, obj2, obj3
#Student. Set rollno, name, mark1, mark2 for 3 students using setdata() and
#them using dispdata().
class student:
    studCount = 0
    def __init__(self,name, rollno, mark1,mark2):
        self.name = name
        self.rollno = rollno
        self.mark1 = mark1
        self.mark2 = mark2
        student.studCount += 1
    def setdata(self):
        print("Total students %d" % student.studCount)
    def displaydata(self):
        print ("Name:",self.name, "rollno:",self.rollno, "mark1:",self.mark
stud1 = student("ravi", 1,22,23)
stud2 = student("rashmi", 2,21,30)
stud3 = student("ratna",3,16,0)
stud1.displaydata()
stud2.displaydata()
stud3.displaydata()
print("Total number ofstudent %d" % student.studCount)
```

```
Name: ravi rollno: 1 mark1: 22 mark2: 23
Name: rashmi rollno: 2 mark1: 21 mark2: 30
Name: ratna rollno: 3 mark1: 16 mark2: 0
Total student 3
```

In [ ]:
```
#Create a parent class Person with constructor(name, idnumber), display() t
#name and idnumber and child class Employee with constructor(name, idnumber
#salary, post) and display() to display name, idnumber, salary and post. Cr
#from parent to pass name and idnumber as parameter and display them. Creat
#objects a and b of Employee to pass name, idnumber, salary and post and di
#them (single inheritance)
class Person:
    name = ""
    idnumber = ""
    salary = ""

    def show_person(self,name,idnumber,salary):
        print(self.name)
class employee(Person):
    def show_employee(self):
        print("name",self.name,"id",idnumber,"salary",salary)
```

```
emp1 = employee()
emp1.name = "ravi"
emp1.idnumber = "21"
emp1.salary ="5000"
emp1.show_person()
emp1.show_employee()
```