In [1]:
```
def area(*args):
    if len(args)==2:
        a=args[1]**2
    elif args[0]=='Rectangle':
        a=args[1]*args[2]
    elif args[0]=='Parallelogram':
        a=args[1]*args[2]
    elif args[0]=='Rhombus':
        a=args[1]*args[2]/2
    else:
        pass
    print("Area of the {0} is {1}\n".format(args[0],str(a)))
```

In [2]:
```
def perimeter(*args):
    if len(args)==2:
        p=4*args[1]
    elif len(args)==3:
        p=2*(args[1]+args[2])
    else:
        pass
    print("Perimeter of the {0} is {1}\n".format(args[0],str(p)))
```

In [3]:
```
c=1
```

In [*]:

```
while(c):
    c=int(input("Select 1 for area, 2 for perimeter: "))
    if c==1:
        x=input("Enter the type of quadrilateral: ")
        if x=="Square":
            s=int(input("Enter side: "))
            area(x,s)
        elif x=="Rectangle":
            l=int(input("Enter length: "))
            b=int(input("Enter breadth: "))
            area(x,l,b)
        elif x=="Parallelogram":
            b=int(input("Enter base: "))
            h=int(input("Enter height: "))
            area(x,b,h)
        elif x=="Rhombus":
            d1=int(input("Enter diagonal 1: "))
            d2=int(input("Enter diagonal 2: "))
            area(x,d1,d2)
        else:
            pass
```

```
elif c==2:
    x=input("Enter the type of quadrilateral: ")
    if (x=="Square") or (x=="Rhombus"):
        s=int(input("Enter side: "))
        perimeter(x,s)
    elif (x=="Rectangle") or (x=="Parallelogram"):
        l=int(input("Enter length: "))
        b=int(input("Enter breadth: "))
        perimeter(x,l,b)
    else:
        pass
else:
    break
```

```
Select 1 for area, 2 for perimeter: 1
Enter the type of quadrilateral: Rectangle
Enter length: 3
Enter breadth: 4
Area of the Rectangle is 12

Select 1 for area, 2 for perimeter: 2
Enter the type of quadrilateral: Square
Enter side: 4
Perimeter of the Square is 16

Select 1 for area, 2 for perimeter: 1
Enter the type of quadrilateral: Rhombus
Enter diagonal 1: 5
Enter diagonal 2: 4
Area of the Rhombus is 10.0

Select 1 for area, 2 for perimeter: 2
Enter the type of quadrilateral: Parallelogram
Enter length: 2
Enter breadth: 4
Perimeter of the Parallelogram is 12


Select 1 for area, 2 for perimeter:
```