

```
public class Num {
```

```
    private int a,b;
```

```
    public void setNum(int i,int j){
```

```
        a=i;
```

```
        b=j;
```

```
    }
```

```
    public void showNum(){
```

```
        System.out.println("a="+a+",b="+b);
```

```
    }
```

```
    public void swap(Num P,Num Q)
```

```
    {
```

```
        int x;
```

```
        x=P.a;
```

```
        P.a=Q.a;
```

```
        Q.a=x;
```

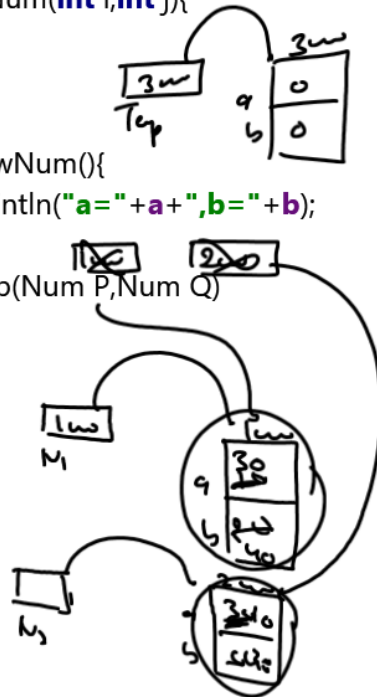
```
        x=P.b;
```

```
        P.b=Q.b;
```

```
        Q.b=x;
```

```
    }
```

```
}
```



```
public class UseNum {
```

```
    public static void main(String[] args) {
```

```
        ✓ Num N1=new Num();
```

```
        ✓ Num N2=new Num();
```

```
        ✓ N1.setNum(10,20);
```

```
        ✓ N2.setNum(30,40);
```

```
        System.out.println("Before swapping:");
```

```
        [ N1.showNum(); a = 10, b = 20
```

```
        [ N2.showNum(); a = 30, b = 40
```

```
        Num Temp=new Num();
```

```
        Temp.swap(N1,N2);
```

```
        System.out.println("After swapping:");
```

```
        N1.showNum();
```

```
        N2.showNum();
```

```
    }
```

```
}
```

```
public class Num {
```

```
    private int a,b;
```

```
    public void setNum(int i,int j){
```

```
        a=i;
```

```
        b=j;
```

```
    }
```

```
    public void showNum(){
```

```
        System.out.println("a="+a+",b="+b);
```

```
    }
```

```
    public void swap(Num P,Num Q)
```

```
    {
```

```
        Num X;
```

```
        X=P;
```

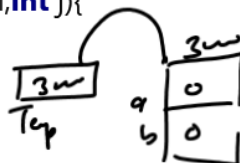
```
        P=Q;
```

```
        Q=X;
```

```
    }
```

```
}
```

Will Not Swap!



```
public class UseNum {
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    public static void main(String[] args) {
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```
        ✓ Num N1=new Num();
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        Num Temp=new Num();
```

```
        Temp.swap(N1,N2);
```

```
        System.out.println("After swapping:");
```

```
        N1.showNum();
```

```
        N2.showNum();
```

```
    }
```

```
}
```

Passing Array Reference As Argument To Method

```
access mod <ret_type> <method_name>(<data type>[ ] <array_ref>)  
{  
    // method body  
}
```

Exercise:

=====

WAP to create a class called **MyMath** having a method called **sum()** which should accept an integer array as argument and should return the sum of all the elements of that array.

Now design the driver class called **UseMyMath**. Declare an integer array of 5 elements, accept input from the user in that array and using the method **sum()** of **MyMath** class, calculate and display the sum of array elements

```
public class MyMath {  
    public int sum(int [] brr){  
        int total=0;  
        for(int x:brr)  
            total+=x;  
        return total;  
    }  
}  
  
package arraypassing;  
import java.util.Scanner;  
public class UseMyMath {  
    public static void main(String[] args) {  
        ✓ int []arr=new int[5];  
        Scanner kb=new Scanner(System.in);  
        for(int i=0;i<arr.length;i++){  
            System.out.println("Enter no:");  
            arr[i]=kb.nextInt();  
        }  
        MyMath obj=new MyMath();  
        int total;  
        total=obj.sum(arr);  
        System.out.println("Sum is "+total);  
    }  
}
```

Hand-drawn diagram illustrating the execution of the code. It shows the 'MyMath' class with a 'sum' method. An array 'arr' with values [1, 2, 3, 4, 5] is passed to the 'sum' method. The method calculates the sum (15) and returns it. The 'UseMyMath' class's 'main' method calls 'sum' and prints the result. A box labeled '3060' is also present, possibly representing a sum of a different set of numbers.

Exercise:

=====

Modify the previous code by making following changes in **MyMath** class:

- Rename the method `sum()` to `calculate()`
- The method `calculate` should now return sum as well as average of array data passed as argument.
- Finally the driver class must display it

