```
//Type of User Define Methods in java
class Methods
{
   //Type 1: No Return without arguments
   public void add()
   {
      int a = 123;
      int b = 10;
      System.out.println("Addition : "+(a+b));
   }
   public void sub(int x, int y){
      System.out.println("Subtraction : "+(x - y));
   }
   public int mul(){
      int a = 123;
      int b = 10;
      return a * b;
   }

   public float div(int x, int y){
      return (float)x / y;
   }
}

class function {
```

```
    public static void main(String[] args) {
        Methods o = new Methods();
                o.add();
                o.sub(123, 10);
                System.out.println("Mul : " + o.mul());
        System.out.println("Division : " + o.div(123, 10));
    }
}
```

Output:

Addition : 133

Subtraction : 113

Mul : 1230

Division : 12.3

//Method Overloading

```
class Calculator {
    // Method 1: Two integers
    public int add(int a, int b) {
        return a + b;
    }
    public int add(int a, int b, int c) {
        return a + b + c;
    }
```

```
    public double add(double a, double b) {
        return a + b;
    }
        public String add(String a, String b) {
        return a + b;
    }
}

public class OverloadingExample {
    public static void main(String[] args) {
        Calculator calc = new Calculator();
        System.out.println("Two ints: " + calc.add(5, 3));
        System.out.println("Three ints: " + calc.add(5, 3, 2));
        System.out.println("Two doubles: " + calc.add(5.5, 3.3));
        System.out.println("Two strings: " + calc.add("Hello", "World"));
    }
}
```

output:

Two ints: 8

Three ints: 10

Two doubles: 8.8

Two strings: HelloWorld

//Builtin Methods

```
public class StringMethods {
    public static void main(String[] args) {
        String str = "Hello World";
        System.out.println("Length: " + str.length());
        System.out.println("Uppercase: " + str.toUpperCase());
        System.out.println("Lowercase: " + str.toLowerCase());
        System.out.println("Substring: " + str.substring(0, 5));
        System.out.println("Replace: " + str.replace("World", "Java"));
        System.out.println("Contains: " + str.contains("Hello"));
    }
}
```

output:

```
Length: 11
Uppercase: HELLO WORLD
Lowercase: hello world
Substring: Hello
Replace: Hello Java
Contains: true
```