### Method

It is a block of code which take input from user then processes it and gives output of the corresponding input. If we want to run method then we have to call otherwise method will not run. We can create method only in class. It is a way to perform some task. It is a collection of instructions that performs a specific task. It provides the reusability of code.

# **Types**

#### 1. Pre-defined

- print();
- sort();
- sqrt();
- nextInt();
- etc...

### 2. User-defined

- add()
- sub()
- display()
- resize()
- etc..

### **Syntax**

```
class Main {
   static void firstMethod() {
   //code block to be executed
   }
}
```

# Recursion

When a method calls itself then the method is called recursive method, and this technique is known as recursion.

### **Syntax**

```
return-type method-name(argument) {
    method-name(argument);
}
```