

## Recursion:

The verbal meaning of the word recursion is defining something in terms of itself. In simple words it means that if to solve a particular problem we use smaller problems of similar nature, solve these smaller problems and then use their result as base to solve bigger problem then we say we are using recursion. For eg: suppose we want to calculate factorial of a number let's say 5! then we can solve it using recursion as follows :

```
public class Factorial {  
    public static void main(String[] args) {  
        System.out.println(fact(5));  
    }  
    static int fact(int n){  
        if(n>=1)  
            return n*fact(n-1);  
        else return 1;  
    }  
}
```

In programming the recursion is used with functions and if a function or method generates a call to itself within it's own body then we say the function has become recursive function or recursive method.