Recursion

When a function calls itself, it is called recursion.

Three things are mandatory in a recursive function: -

1. Base Case – It is defined as the case where we have to stop the program/function

2. Recurrence Relation –

3. Processing Part

We need base case because if we will not use base case, it will cause segmentation fault due to stack overflow.

A function can be of two types

1. where first base case comes then processing and then recursive relation. It is called tail recursion.

2. where first base case comes then recursive relation and then processing. It is called head recursion.