

## 19 计算机思维与问题解决

### 19.1 Algorithms 算法

#### Abstract Data Type (ADT) 抽象数据类型

a collection of data with associated operations. Example: stack, queue, linked list, binary tree.

### 19.2 Recursion 递归

a process using a function or procedure that calls itself. It must have a base case, in which it returns without making a recursive call, and a general case where the recursive call takes place.

#### base case 边界情形

an explicit solution to a recursive function.

#### General case 一般情形

a definition of a recursive function in terms of itself.