Describing an algorithm

English:
"Find the largest number in the list"

Pseudocode:

\textit{Write down the first number in the list, and call it 'max'
For each number in the list
  \textit{if it's bigger than 'max'
    \textit{replace the value of 'max' by the larger value
When we're all done, 'max' is the largest number we found}

Python:

```python
def findMax(list):
    max = list[0]
    for num in list:
        if num > max:
            max = num
    return max
```

Java:

```java
public static int findMax(int[] list)
{
    int max = list[0];
    for (int num : list)
    {
        if (num > max)
        {
            max = num;
        }
    }
    return max;
}
```

C:

```c
int find_max(int * list, int size)
{
    int max = *list;
    int * pos = list;
    while (pos < list + size)
    {
        if (*pos > max)
        {
            max = *pos;
        }
        ++pos;
    }
    return max;
}
```
Pseudocode (for another approach to the same problem):

*If the list has only one number in it, return that number.*
*Otherwise, return the maximum of a) the first number or b) the largest number in the rest of the list.*

**Python:**

```python
def find_max(list):
    if len(list) == 1:
        return list[0]
    else:
        return max(list[0], find_max(list[1:]))
```

**Erlang:**

```erlang
findmax([A]) ->
    A;
findmax([A | B]) ->
    max(A, findmax(B)).
```

**Clojure:**

```clojure
(defn findmax [list]
    (if (= (count list) 1)
        (first list)
        (max (first list) (findmax (rest list)))))
```