1) (5 pts) ANL (Algorithm Analysis)

What is the **worst-case** Big O runtime for the following function, in terms of the input parameter, **n**? (You may assume that the array pointed to by list is of length **n**.) In order to receive full credit, you must use words to explain your reasoning AND arrive at the correct answer.

```
int mystery(int* list, int n) {

    int i = 0, j = 1;

    if (n < 2) return 0;

    while (j < n) {

        while (i < j && list[i] < list[j]) i++;
        j++;
    }

    return i;
}
```

REASON:

RUN-TIME: (_____)