# Program #2
# Recursive Linear Search

For this program you will first read in 10 integers and store them in an array. Then you will search the array using the recursive version of linear search. Be sure to test the program both for the case where the integer for which you are looking is in the array and the integer for which you are looking is not in the array. If the integer is in the array, be sure to give the index of the first occurrence of the integer for which you are looking.

Notice that there are a couple of minor changes from the algorithm discussed in class. Why is this better?

```
Search the array a[0,..,N-1] for the element s_value.
Procedure LSearch ( array Array, int i,
                                  int M, value Search )
begin LSearch
    if ( i > M )
        return not found
    if ( Array[i] = Search )
        return found at i
    LSearch ( Array, i + 1, Search )
end LSearch
Linear_Search:
begin
    LSearch ( a, 0, N - 1, s_value )
end
```