CS1713 Introduction to Computer Programming II
Recitation #07: Array and Sorting

Part I: Write and Test C code/program

Write a C program to implement the following Bubble Sort algorithm, which works on an int array key[], where N is the size of the array.

```c
bChange = TRUE;
for i=0; i < (N-1) and bChange; i=i+1
{
    bChange = FALSE;
    for j=0; j < N-i-1; j=j+1
    {
        if key[j+1] < key[j]
        {
            Exchange R[j] and R[j+1];
            bChange = TRUE;
        }
    }
    //print out the array
}
```

Suppose that an array has the following 7 elements:

| 30 | 20 | 10 | 5 | 40 | 35 | 25 |

Add print statement at the end of the outer for-loop, and write down the array content:

A. After first major iteration

Result array:

|   |   |   |   |   |   |   |

A. After second major iteration

Result array:

|   |   |   |   |   |   |   |

A. After third major iteration

Result array:

|   |   |   |   |   |   |   |