Chapter 14   Bubble Sort

1.) what is the bubble sort algorithm and how does it work? write the psuedo code

```
// begin with postion i = 0;
// Compare i and i+1
// if A[i] > A[i+1] swep the elements, left is larger than right
// move the pointer to right
```

A bubble sort is an algorithm that repeatedly swep the element it is next to until it is in the right order.

```java
public class Bubblesort {
    public static void main(String[] args) {
        int temp = 0;
        int n = arr.

    static void bubblesort(int[] arr) {
        int n = arr.length;
        int temp = 0;
        for(int i = 0; i < n; i++) {
            for(int j = 1; j < (n-1); j++) {
                if(arr[j-1] > arr[j]) {
                    temp = arr[j-1];
                    arr[j-1] = arr[j];
                    arr[j] = temp;
                }
```

2) Given the input

7 2 3 8 9 1
2 7 3 8 9 1
2 3 7 8 9 1
2 3 7 8 1 9
2 3 7 1 8 9
2 3 1 7 8 9
2 1 3 7 8 9
1 2 3 7 8 9

3) Given the input

8 4 9 7 2 5
4 8 9 7 2 5
4 8 7 9 2 5
4 7 8 9 2 5
4 7 8 2 9 5
4 7 2 8 9 5
4 2 7 8 9 5
2 4 7 8 9 5
2 4 7 8 5 9
2 4 7 5 8 9
2 4 5 7 8 9