```c
#include<stdio.h>

void printArray(int* A, int n){
    for (int i = 0; i < n; i++)
    {
        printf("%d ", A[i]);
    }
    printf("\n");
}
void bubbleSort(int *A, int n){
    int temp;
    int isSorted = 0;
    for (int i = 0; i < n-1; i++) // For number of pass
    {
        printf("Working on pass number %d\n", i+1);
        for (int j = 0; j <n-1-i ; j++) // For comparison in each p
        {
            if(A[j]>A[j+1]){
                temp = A[j];
                A[j] = A[j+1];
                A[j+1] = temp;
            }
        }
    }
}

void bubbleSortAdaptive(int *A, int n){
    int temp;
    int isSorted = 0;
    for (int i = 0; i < n-1; i++) // For number of pass
    {
        printf("Working on pass number %d\n", i+1);
        isSorted = 1;
        for (int j = 0; j <n-1-i ; j++) // For comparison in each p
        {
            if(A[j]>A[j+1]){
                temp = A[j];
                A[j] = A[j+1];
                A[j+1] = temp;
```

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40:                     isSorted = 0;
41:                 }
42:             }
43:             if(isSorted){
44:                 return;
45:             }
46:         }
47: }
48:
49: int main(){
50:     // int A[] = {12, 54, 65, 7, 23, 9};
51:     int A[] = {1, 2, 5, 6, 12, 54, 625, 7, 23, 9, 987};
52:     // int A[] = {1, 2, 3, 4, 5, 6};
53:     int n = 11;
54:     printArray(A, n); // Printing the array before sorting
55:     bubbleSort(A, n); // Function to sort the array
56:     printArray(A, n); // Printing the array before sorting
57:     return 0;
58: }
59:
```