

1. You are given with an array arr which contains integer elements. Sort these elements in ascending order using insertion sort and print the 6th Iteration result.

Example:

Input:98,23,45,14,6,67,33,42

Output:6,14,23,33,45,67,98,42

ans:

```
#include <stdio.h>
```

```
void insertionSort(int arr[], int n) {  
    int i, key, j;  
    for (i = 1; i < n; i++) {  
        key = arr[i];  
        j = i - 1;  
  
        while (j >= 0 && arr[j] > key) {  
            arr[j + 1] = arr[j];  
            j = j - 1;  
        }  
        arr[j + 1] = key;  
    }  
}
```

```
int main() {  
    int arr[] = {98, 23, 45, 14, 6, 67, 33, 42};  
    int n = sizeof(arr) / sizeof(arr[0]);  
  
    insertionSort(arr, n);  
  
    printf("6th Iteration Result: ");  
    for (int i = 0; i < n; i++) {  
        printf("%d ", arr[i]);  
    }  
  
    return 0;  
}
```