**1.SORT ASCENDING**

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

C Program

#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;

if (i == 6) {

printf("6th Iteration Result: ");

for (int k = 0; k < n; k++) {

printf("%d ", arr[k]);

}

printf("\n");

}

}

}

int main() {

int arr[] = {98, 23, 45, 14, 6, 67, 33, 42};

int n = sizeof(arr) / sizeof(arr[0]);

insertionSort(arr, n);

return 0;

}

