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#include <stdio.h>

// C program for insertion sort
#include <math.h>
#include <stdio.h>

/* Function to sort an array
   using insertion sort*/
void insertionSort(int arr[], int n)
{
    int i, key, j;
    for (i = 1; i < n; i++)
    {
        key = arr[i];
        j = i - 1;

        /* Move elements of arr[0..i-1],
           that are greater than key,
           to one position ahead of
           their current position */
        while (j >= 0 && arr[j] > key)
        {
            arr[j + 1] = arr[j];
            j = j - 1;
        }
        arr[j + 1] = key;
```

```
        }
}

// A utility function to print
// an array of size n
void printArray(int arr[], int n)
{
        int i;
        for (i = 0; i < n; i++)
                printf("%d ", arr[i]);
        printf("\n");
}

// Driver code
int main()
{
        int arr[] = {12, 11, 13, 5, 6};
        int n = 5;
        insertionSort(arr, n);
        printArray(arr, n);

        return 0;
}
```