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#include <stdio.h>
void insertionsort(int[],int);

int main()
{
    int a[10],n,i;
    printf("\nEnter size of array:");
    scanf("%d",&n);
    printf("\nEnter elements into array:");
    for(i=0;i<n;i++)
        scanf("%d",&a[i]);
    insertionsort(a,n);
    return 0;
}

void insertionsort(int a[], int n)
{
    int i, temp, j;
    for (i = 1; i < n; i++)
    {
        temp = a[i];
        j = i - 1;
        // Move elements of a[0..i-1] that are greater than key to one position ahead of their current
position
        while (j >= 0 && a[j] > temp)
        {
            a[j + 1] = a[j];
            j = j - 1;
        }
        a[j + 1] = temp;
        printf("\nAfter Pass %d :",i);
        for(j=0;j<n;j++)
            printf("%d  ",a[j]);
    }
    printf("\nAfter insertion sort: ");
    for(i=0;i<n;i++)
        printf("%d  ",a[i]);
}

```