```c
#include <stdio.h>

void insert(int a[], int n)
{
    int i, j, temp;
    for (i = 1; i < n; i++) {
        temp = a[i];
        j = i - 1;


        while(j>=0 && temp <= a[j])
        {
            a[j+1] = a[j];
            j = j-1;
        }
        a[j+1] = temp;
    }
}


void printArr(int a[], int n)
{
    int i;
    for (i = 0; i < n; i++)
        printf("%d ", a[i]);
}


int main()
{
    int a[] = { 2, 31, 2, 8, 3, 17 };
    int n = sizeof(a) / sizeof(a[0]);
    printf("Before sorting array elements are - \n");
    printArr(a, n);
```
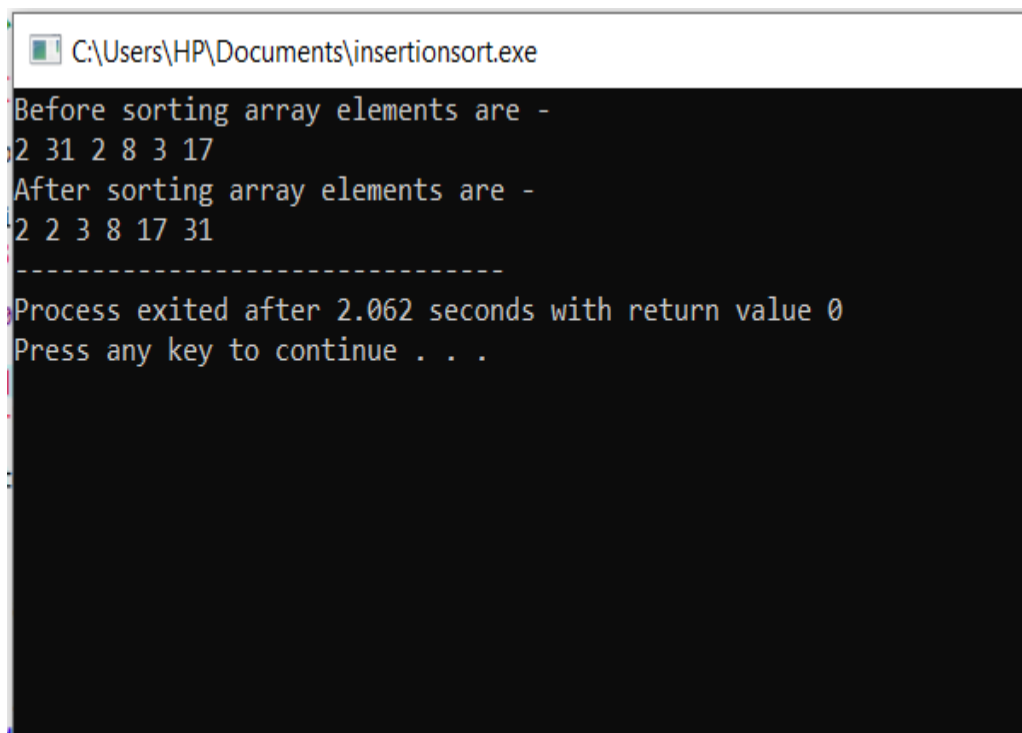
```
insert(a, n);

printf("\nAfter sorting array elements are - \n");

printArr(a, n);


return 0;
}
```

```
Before sorting array elements are -
2 31 2 8 3 17
After sorting array elements are -
2 2 3 8 17 31
-------------------------------
Process exited after 2.062 seconds with return value 0
Press any key to continue . . .
```