17)

#include <stdio.h>

void insert(int a[], int n) /\* function to sort an aay with insertion sort \*/

{

int i, j, temp;

for (i = 1; i < n; i++) {

temp = a[i];

j = i - 1;

while(j>=0 && temp <= a[j]) /\* Move the elements greater than temp to one position ahead from their current position\*/

{

a[j+1] = a[j];

j = j-1;

}

a[j+1] = temp;

}

}

void printArr(int a[], int n) /\* function to print the array \*/

{

int i;

for (i = 0; i < n; i++)

printf("%d ", a[i]);

}

int main()

{

int a[] = { 12, 31, 25, 8, 32, 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;

}

