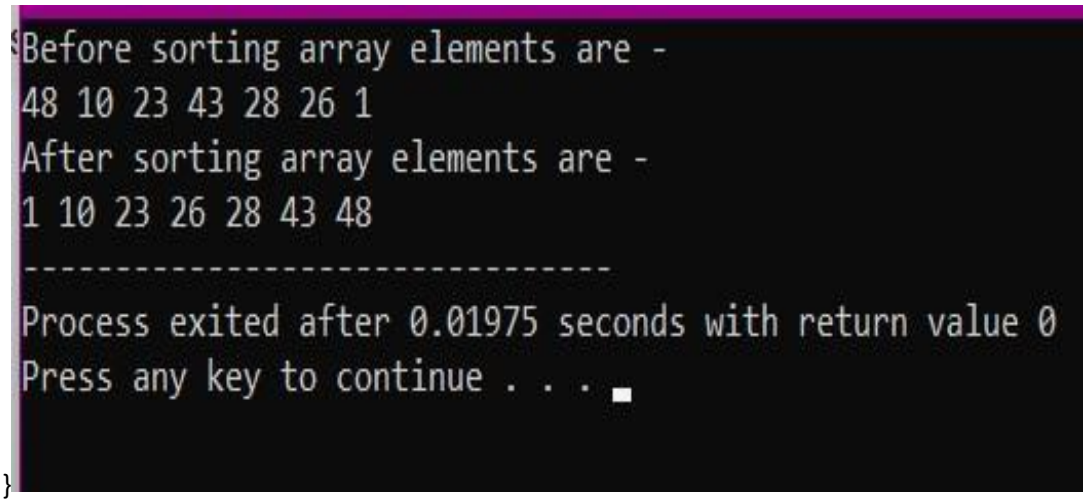
```
#include <stdio.h>
void heapify(int a[], int n, int i)
{
 int largest = i;
 int left = 2 * i + 1;
 int right = 2 * i + 2;
 if (left < n && a[left] > a[largest])
 largest = left;
 if (right < n && a[right] > a[largest])
 largest = right;
 if (largest != i) {
 int temp = a[i];
 a[i] = a[largest];
 a[largest] = temp;

 heapify(a, n, largest);
 }
}
void heapSort(int a[], int n)
{
 for (int i = n / 2 - 1; i >= 0; i--)
 heapify(a, n, i);
 for (int i = n - 1; i >= 0; i--)
 {
 int temp = a[0];
 a[0] = a[i];
 a[i] = temp;

 heapify(a, i, 0);
 }
}
```

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

}
int main()
{
 int a[] = {48, 10, 23, 43, 28, 26, 1};
 int n = sizeof(a) / sizeof(a[0]);
 printf("Before sorting array elements are - \n");
 printArr(a, n);
 heapSort(a, n);
 printf("\nAfter sorting array elements are - \n");
 printArr(a, n);
 return 0;
```




```
}
```