Program:-

```c
#include <stdio.h>

void heapify(int a[],int n,int i){
    int max=i;
    int l=2*i+1;
    int r=2*i+2;
    if(l<n && a[l]>a[max]) max=l;
    if(r<n && a[r]>a[max]) max=r;
    if(max!=i){
        int t=a[i];
        a[i]=a[max];
        a[max]=t;
        heapify(a,n,max);
    }
}

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 t=a[0];
        a[0]=a[i];
        a[i]=t;
        heapify(a,i,0);
    }
}

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

int main(){
    int n;
    printf("Enter number of elements: ");
    scanf("%d",&n);
    int a[n];
    printf("Enter %d elements:\n",n);
    for(int i=0;i<n;i++) scanf("%d",&a[i]);
    printf("Original array: ");
    printArray(a,n);
    heapSort(a,n);
    printf("Sorted array (Heap Sort): ");
    printArray(a,n);
    return 0;
}
```

Output:-

Enter number of elements: 7
Enter 7 elements:
53 67 21 43 78 94 24
Original array: 53 67 21 43 78 94 24
Sorted array (Heap Sort): 21 24 43 53 67 78 94