**public** **class** HeapSort {

**public** **void** sort(**int** arr[]) {

**int** n = arr.length;

**for** (**int** i = n/2 -1; i>=0; i--) {

heapfiy(arr, n,i);

}

**for** (**int** i = n-1; i>=0;i--) {

**int** temp = arr[0];

arr[0]= arr[i];

arr[i]= temp;

heapfiy(arr, i, 0);

}

}

**public** **void** heapfiy(**int** arr[], **int** n, **int** i) {

**int** largest = i;

**int** L= 2\*i+1;

**int** R= 2\*i +2;

**if** (L < n && arr[L] > arr[largest])

largest = L;

**if** (R< n && arr[R] > arr[largest])

largest = R;

**if**(largest != i) {

**int** swap = arr[i];

arr[i] = arr[largest];

arr[largest]= swap;

heapfiy(arr, n, largest);

}

}

**public** **static** **void** printArray(**int** arr[]) {

**int** n = arr.length;

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

System.***out***.print(arr[i] + " ");

System.***out***.println();

}

**public** **static** **void** main(String[] args) {

**int** arr[] = {5, 22, 9, 76, 63, 81, 48, 92, 54, 28};

HeapSort hs= **new** HeapSort();

hs.sort(arr);

System.***out***.println("The Sorted Array is : ");

*printArray*(arr);

}

}