19. Write a C program to implement Heap sort

**Aim**

To write a C program that sorts a series of numbers using the **Heap Sort algorithm**.

**Algorithm**

1. Start
2. Build a max-heap from the given array.
3. Max-heap means parent ≥ children.
4. Swap the root (maximum element) with the last element.
5. Reduce heap size by 1.
6. Heapify the root to maintain the max-heap property.
7. Repeat steps 3–5 until only one element remains.
8. The array is now sorted in ascending order.
9. End

**Program**

