Questã0 7 – ED1 Lista 08 – Gabriel Ramiro Mesquita

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1º passo - transformar em heapmax (heapfy) para n/2 até a primeira posiçao | | | | | | | |
| 22 | 4 | 35 | **12** | 3 | 18 | 12 | **55** |
| 22 | 4 | 35 | **55** | 3 | 18 | 12 | **12** |
| 22 | 4 | **35** | 55 | 3 | **18** | **12** | 12 |
| 22 | 4 | **35** | 55 | 3 | **18** | **12** | 12 |
| 22 | **4** | 35 | **55** | **3** | 18 | 12 | 12 |
| 22 | **55** | 35 | **4** | **3** | 18 | 12 | 12 |
| 22 | 55 | 35 | **4** | 3 | 18 | 12 | **12** |
| 22 | 55 | 35 | **12** | 3 | 18 | 12 | **4** |
| **22** | **55** | **35** | 12 | 3 | 18 | 12 | 4 |
| **55** | **22** | **35** | 12 | 3 | 18 | 12 | 4 |
| 55 | **22** | 35 | **12** | **3** | 18 | 12 | 4 |
| 55 | **22** | 35 | **12** | **3** | 18 | 12 | 4 |
| Heap Máxima formada! | | |  |  |  |  |  |
| Agora passa-se a raiz para o final do vetor e inicia-se o heapfy novamente a partir da raiz que foi trocada até n-1 | | | | | | | |
| **55** | 22 | 35 | 12 | 3 | 18 | 12 | **4** |
| **4** | 22 | 35 | 12 | 3 | 18 | 12 | **55** |
| **4** | **22** | **35** | 12 | 3 | 18 | 12 | **55** |
| **35** | **22** | **4** | 12 | 3 | 18 | 12 | **55** |
| 35 | 22 | **4** | 12 | 3 | **18** | **12** | **55** |
| 35 | 22 | **18** | 12 | 3 | **4** | **12** | **55** |
| Heap Máxima formada novamente! | | | |  |  |  |  |
| Agora passa-se a raiz para o final do vetor e inicia-se o heapfy novamente a partir da raiz que foi trocada até n-1 | | | | | | | |
| **35** | 22 | 18 | 12 | 3 | 4 | **12** | **55** |
| **12** | 22 | 18 | 12 | 3 | 4 | **35** | **55** |
| **12** | **22** | **18** | 12 | 3 | 4 | **35** | **55** |
| **22** | **12** | **18** | 12 | 3 | 4 | **35** | **55** |
| 22 | **12** | 18 | **12** | **3** | 4 | **35** | **55** |
| 22 | **12** | 18 | **12** | **3** | 4 | **35** | **55** |
| Repete-se o ciclo até sobre apenas um nó que já vai ser o menor e o heapsort chega ao fim | | | | | | | |
| **22** | 12 | 18 | 12 | 3 | **4** | **35** | **55** |
| **4** | 12 | 18 | 12 | 3 | **22** | **35** | **55** |
| **4** | **12** | **18** | 12 | 3 | **22** | **35** | **55** |
| **18** | **12** | **4** | 12 | 3 | **22** | **35** | **55** |
| **18** | 12 | 4 | 12 | **3** | **22** | **35** | **55** |
| **3** | 12 | 4 | 12 | **18** | **22** | **35** | **55** |
| **3** | **12** | **4** | 12 | **18** | **22** | **35** | **55** |
| **12** | **3** | **4** | 12 | **18** | **22** | **35** | **55** |
| 12 | **3** | 4 | **12** | **18** | **22** | **35** | **55** |
| 12 | **12** | 4 | **3** | **18** | **22** | **35** | **55** |
| **12** | 12 | 4 | **3** | **18** | **22** | **35** | **55** |
| **3** | 12 | 4 | **12** | **18** | **22** | **35** | **55** |
| **3** | **12** | **4** | **12** | **18** | **22** | **35** | **55** |
| **12** | **3** | **4** | **12** | **18** | **22** | **35** | **55** |
| **12** | 3 | **4** | **12** | **18** | **22** | **35** | **55** |
| **4** | 3 | **12** | **12** | **18** | **22** | **35** | **55** |
| **4** | **3** | **12** | **12** | **18** | **22** | **35** | **55** |
| **4** | **3** | **12** | **12** | **18** | **22** | **35** | **55** |
| **4** | **3** | **12** | **12** | **18** | **22** | **35** | **55** |
| **3** | **4** | **12** | **12** | **18** | **22** | **35** | **55** |
| **3** | **4** | **12** | **12** | **18** | **22** | **35** | **55** |
| **3** | **4** | **12** | **12** | **18** | **22** | **35** | **55** |