14, 4, 5, 1, 18, 6

n-1 = 5

N = 6

Selection

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| I | J | Min | A[0] | A[1] | A[2] | A[3] | A[4] | A[5] |
|  |  | 0 | 14 | 4 | 5 | 1 | 18 | 6 |
| 0 | 1 | 1 | 14 | 4 | 5 | 1 | 18 | 6 |
| 0 | 2 | 1 | 14 | 4 | 5 | 1 | 18 | 6 |
| 0 | 3 | 3 | 14 | 4 | 5 | 1 | 18 | 6 |
| 0 | 4 | 3 | 14 | 4 | 5 | 1 | 18 | 6 |
| 0 | 5 | 3 | 14 | 4 | 5 | 1 | 18 | 6 |
|  |  |  | **1** | 4 | 5 | **14** | 18 | 6 |
| 1 | 2 | 1 | 1 | 4 | 5 | 14 | 18 | 6 |
| 1 | 3 | 1 | 1 | 4 | 5 | 14 | 18 | 6 |
| 1 | 4 | 1 | 1 | 4 | 5 | 14 | 18 | 6 |
| 1 | 5 | 1 | 1 | 4 | 5 | 14 | 18 | 6 |
|  |  |  |  |  |  |  |  |  |
| 2 | 3 | 2 | 1 | 4 | 5 | 14 | 18 | 6 |
| 2 | 4 | 2 | 1 | 4 | 5 | 14 | 18 | 6 |
| 2 | 5 | 2 | 1 | 4 | 5 | 14 | 18 | 6 |
|  |  |  |  |  |  |  |  |  |
| 3 | 4 | 3 | 1 | 4 | 5 | 14 | 18 | 6 |
| 3 | 5 | 5 | 1 | 4 | 5 | 14 | 18 | 6 |
|  |  |  | 1 | 4 | 5 | 6 | 18 | 14 |
| 4 | 5 | 5 | 1 | 4 | 5 | 6 | 18 | 14 |
|  |  |  | 1 | 4 | 5 | 6 | 14 | 18 |

Insertion

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| I | J | Val | A[0] | A[1] | A[2] | A[3] | A[4] | A[5] |
|  |  |  | 14 | 4 | 5 | 1 | 18 | 6 |
| 1 | 0 | 4 | 14 | **14** | 5 | 1 | 18 | 6 |
|  | -1 |  | **4** | 14 | 5 | 1 | 18 | 6 |
| 2 | 1 | 5 | 4 | 14 | **14** | 1 | 18 | 6 |
|  | 0 | 5 | 4 | 5 | 14 | 1 | 18 | 6 |
| 3 | 2 | 1 | 4 | 5 | 14 | **14** | 18 | 6 |
| 3 | 1 | 1 | 4 | 5 | **5** | 14 | 18 | 6 |
| 3 | 0 | 1 | 4 | **4** | 5 | 14 | 18 | 6 |
|  | -1 | 1 | **1** | 4 | 5 | 14 | 18 | 6 |
| 4 | 3 | 18 | 1 | 4 | 5 | 14 | 18 | 6 |
|  | 3 | 18 | 1 | 4 | 5 | 14 | 18 | 6 |
| 5 | 4 | 6 | 1 | 4 | 5 | 14 | 18 | **18** |
| 5 | 3 | 6 | 1 | 4 | 5 | 14 | **14** | 18 |
| 5 | 2 | 6 | 1 | 4 | 5 | **6** | 14 | 18 |

Bubble

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| I | J | A[0] | A[1] | A[2] | A[3] | A[4] | A[5] |
|  |  | 14 | 4 | 5 | 1 | 18 | 6 |
| 0 | 1 | **4** | **14** | 5 | 1 | 18 | 6 |
| 0 | 2 | 4 | 14 | 5 | 1 | 18 | 6 |
| 0 | 3 | **1** | 14 | 5 | **4** | 18 | 6 |
| 0 | 4 | 1 | 14 | 5 | 4 | 18 | 6 |
| 0 | 5 | 1 | 14 | 5 | 4 | 18 | 6 |
| 1 | 2 | 1 | **5** | **14** | 4 | 18 | 6 |
| 1 | 3 | 1 | **4** | 14 | **5** | 18 | 6 |
| 1 | 4 | 1 | 4 | 14 | 5 | 18 | 6 |
| 1 | 5 | 1 | 4 | 14 | 5 | 18 | 6 |
| 2 | 3 | 1 | 4 | **5** | **14** | 18 | 6 |
| 2 | 4 | 1 | 4 | 5 | 14 | 18 | 6 |
| 2 | 5 | 1 | 4 | 5 | 14 | 18 | 6 |
| 3 | 4 | 1 | 4 | 5 | 14 | 18 | 6 |
| 3 | 5 | 1 | 4 | 5 | **6** | 18 | **14** |
| 4 | 5 | 1 | 4 | 5 | 6 | **14** | **18** |