Insertion Sort

1)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 22 | 27 | 16 | 2 | 18 | 6 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 2 | 22 | 27 | 16 | 18 | 6 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 2 | 6 | 22 | 27 | 16 | 18 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 2 | 6 | 16 | 22 | 27 | 18 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 2 | 6 | 16 | 18 | 22 | 27 |

2)O(n^2)

3) Average Case: O(n^2) Worst Case: O(n^2) Best Case: O(n)

4)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7 | 3 | 5 | 8 | 2 | 9 | 4 | 15 | 16 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | 7 | 3 | 5 | 8 | 9 | 4 | 15 | 16 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | 3 | 7 | 5 | 8 | 9 | 4 | 15 | 16 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | 3 | 4 | 7 | 5 | 8 | 9 | 15 | 16 |