|  |  |  |
| --- | --- | --- |
| **Algorithms** | **DBCLASD** | **GMM** |
| **Complexity** | O(n\*log(n)) | O(n^2\*kt) |
| **Comparison** | Middle | High |

# **CLUSTERING ALGORITHMS COMPLEXITY:**

**Clustering Based on Distribution:**

**Clustering Based on Density:**

|  |  |  |
| --- | --- | --- |
| **Algorithms** | DBCLASD | GMM |
| **Complexity** | O(n\*log(n)) | O(n^2\*kt) |
| **Comparison** | Middle | High |

**Clustering Based on Hierarchy**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Algorithms** | BIRCH | CURE | ROCK | Chameleon |
| **Complexity** | O(n) | O(s^2\*s) | O(n^2\*log(n)) | O(n^2) |
| **Comparison** | Low | Low | High | High |

**Clustering Based on Fuzzy Theory**

|  |  |  |  |
| --- | --- | --- | --- |
| Algorithms | FCM | FCS | MM |
| Complexity | O(n) | Kernel | O(v^^2\*n) |
| Comparison | Low | High | Middle |