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| **HashMap class** | **Hashtable class** |
| All methods are non synchronized | All methods are synchronized |
| Performance is high | Performance is low |
| Multiple threads are allowed at same time | Single thread is allowed at same time |
| Default capacity is 16 | Default capacity is 11 |
| Null key are allowed only once | Null key is not allowed |
| Null values allowed multiple times | Null values are not allowed |
| Child class of HashMap class is LinkedHashMap | Child class of Hashtable is Properties class. |
| It does not maintained the insertion order | It insert the values as per the Hash code |

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| **HashMap class** | **LinkedHash class** |
| Underlying data structure is Hashtable | Underlying data structure is Hashtable and LinkedList |
| It is implemented class of Map interface | It is child class of HashMap class |
| Insertion order is not maintained | Insertion order is maintained |

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| **HashMap class** | **TreeMap class** |
| Underlying data structure is Hashtable | Underlying data structure is Red-Black Tree |
| It is implemented class of Map interface | It is implemented class of NavigableMap interface |
| Insertion order is not maintained | It insert the values as per the ascending order |
| We can add heterogenous key-value | In TreeMap key should be homogeneous but value be heterogenous |
| There is no new method present in HashMap class so always we have to use Map interface methods | There is no new methods present in TreeMap so always we have to use methods from Map interface, SortedMap interface and NavigableMap interface |

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| **Hashtable class** | **TreeMap class** |
| Underlying data structure is Hashtable | Underlying data structure is Red-Black Tree |
| All methods are synchronized | All methods are not synchronized |
| Performance is low | Performance is high |
| At same time single thread is allowed | Multiple threads are allowed at same time |
| We can add heterogenous key-value | In TreeMap key should be homogeneous but value be heterogenous |
| There is no new method present in Hashtable class so always we have to use Map interface methods | There is no new methods present in TreeMap so always we have to use methods from Map interface, SortedMap interface and NavigableMap interface |
| It will insert the value as per the Hash Code | It will insert the values as per the ascending order |
| Default capacity is 11 | Default capacity is 16 |