ArrayList vs Vector

|  |  |
| --- | --- |
| **ArrayList** | **Vector** |
| ArrayList is a non-sync, | Vector is sync, |
| ArrayList can grow and shrink dynamically, it grows by half of its size | Like ArrayList, Vector can grow and shrink dynamically, however it grows by double of its size when resized |
| ArrayList gives better performance (fast) | Vector is slow |
| ArrayList is not a legacy class | Vector is a legacy class |
| ArrayList uses iterator to traverse the elements | Vector can use iterator as well as Enumeration to traverse the elements |

There are few similarities between these classes:

1. Both Vector and ArrayList use growable array data structure
2. The iterator and listiterator returned by these classes are fail-fast
3. They both are ordered collection classes as they maintain the elements insertion order
4. Vector & ArrayList allows duplicate and null values
5. They both grows and shrink’s automatically when overflow and deletion happens