**Assignment-4**

Hashmap:

Hashmaps are map based collection class and it helps to store keys and values pairs. Its mandatory to enter a key and assign a value for the key. It can be of same or different data type. It does not return the output in the same order as input. It is denoted as hashmap<key, Value>.

Difference between array and hashmap:

In an array, the memory consumption cannot be shrinked when objects are removed. It can be shrinked in hashmap.

Array maintains order but hashmap doesnot.

Why is hashmap preferred?

Hashmaps require less space than arrays for longer lists.

Hashmaps can easily add or remove values in an list.

Hashmaps are not synchronized. Can be used in multi threads too.