HashSet vs HasMap

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| **HashSet** | **HashMap** |
| HashSet class implements the Set Interface | HashMap class implements the Map Interface |
| In HashSet we store objects (elements or values) ex., if we have a HashSet of string elements then it could depict a set of HashSet elements: {“Hello”, “Hi”, “Bye”, “Run”} | HashMap is used for storing key & value pairs., in short it maintains the mapping of key & value, ex., {1->”Hello”, 2->”Hi”, 3-> “Bye”, 4-> “Run”} |
| HashSet does not allow duplicate elements that means you can not store duplicate values in HashSet | HashMap does not allow duplicate keys however it allows to have duplicate values |
| HashSet permits to have a single null value | HashMap permits single null key and any number of null values |

Similarities:

1. Both HashMap and HashSet are not synchronized which means they are not suitable for thread – safe operations until unless synchronized explicitly, this is how you can synchronize them explicitly

HashSet:

Set s = Collections.synchronizedSet(new HashSet(…));

HashMap:

Map m = Collections.synchronizedMap(new HashMap(…));