

## Day 6: Lab assignment Java Collection

Try different methods of Set and List and complete the table below

No.	Method	Return Type	Description(List)	Description(Set)
1	add(Object element)	boolean	It is used to append the specified element at the end of a list.	Adds a new value to the set
2	addAll(Collection c)	boolean	It is used to append all of the elements in the specified collection to the end of a list.	Adds all the elements of a collection to the specified set
3	remove(Object element)	boolean	It is used to remove the first occurrence of the specified element.	Removes a specified value from the set
4	removeAll(Collection c)	boolean	It is used to remove all the elements from the list.	Removes the elements of a collection from the set to find the difference
5	clear()	void	It is used to remove all of the elements from this list.	Clears all the values of a set (does not clear the set itself)
6	size()	Integer	It is used to return the number of elements present in the list.	Returns the size of the set
9	contains(Object element)	boolean	It returns true if the list contains the specified element	Checks if the specified element is present in a set
10	iterator()	Iterator<E>	used to get an iterator over the elements in this list in proper sequence	Returns an iterator object to parse through the set
11	toArray()	array	returns an array containing all the elements present in the list in proper order.	Creates an array with the elements of a set

Q2. create a file story.txt and put some text into it. read that file and find the frequency of each word in the file in the and print it

Ex:  
story.txt  
life is full of fun life is full of fun life is full of fun life

O/P:  
life appear 4 times  
is appear 3 times  
.....  
.....

Q3. Create a class BookCollection which contains:

1. the owner's name and an array of books that the owner has,
2. toString( ) that outputs all the books in the BookCollection in a nice format.
3. a method hasBook(Book b) which checks if the book b is contained in the array (we consider two books the same if they have the same title and author).

4. a method sort() that sorts the books in the array by the lexicographical order of the book title, and author.

Create your own BookCollection and check if you own a particular book:"Java in depth". Sort the

BookCollection

and output the BookCollection.

Q4. Consider file data:

97.59780253225763  
23.705044359023198  
72.97025259152822  
18.986484094410137  
77.56528079180427  
88.5456385076513  
59.09494795452861  
72.71304984780839  
80.0202893029642  
29.58427968260707  
74.66713563267237  
27.40345943374961  
15.990164966686493  
58.852582668688534  
45.58743329596889  
77.2227556103568  
53.49035808405568  
93.5583604428736  
35.09314691785803  
9.812059847790467  
51.438605600928376  
6.081908597641594  
2.604194278086147  
99.43752090812772  
20.355993598952395

Put data into a file named data.txt, Read from data.txt all the doubles (edited by a user) and display the biggest one.