ASSIGNMENT

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Java Vector

Vector is like the dynamic array which can grow or shrink its size Unlike array. We can store n- number of elements in it has there is no size limit. This is a collection of different data types.

It is found in *java.util* package and implements the list interface , so we can use all the methods of list interface here.

Vector List= new Vector();

Vector Class Methods

- add() - Inserts the specified element at the specified position in this Vector.
- addAll() - Appends all of the elements in the specified Collection to the end of this Vector
- addElement() - Adds the specified component to the end of this vector, increasing its size by one
- capacity() – used to get the current capacity of this vector.
- clear() - Removes all of the elements from this Vector.

- clone() - Returns a clone of this vector. The copy will contain a reference to a clone of the internal data array of this `Vector` object.
- contains() - Returns `true` if this vector contains the specified element
- containsAll() - Returns true if this Vector contains all of the elements in the specified Collection
- elementAt() - Returns the component at the specified index.
- firstElement() - Returns the first component (the item at index `0`) of this vector
- get() - Returns the element at the specified position in this Vector.
- isEmtpty - Tests if this vector has no components
- iterator() - Returns an iterator over the elements in this list in proper sequence.
- remove() - Removes the element at the specified position in this Vector.
- removeAll() - Removes from this Vector all of its elements that are contained in the specified Collection.
- set() - Replaces the element at the specified position in this Vector with the specified element

```java
import java.util.Vector;

public class VectorSample {

public static void main(String ar[]) {

                Vector list =new Vector(5);

                list.addElement(10);

                list.addElement(11);

                list.addElement(12);

                list.addElement(13);

                list.addElement(14);

                System.out.println(list);

                System.out.println(list.capacity());

                System.out.println(list.get(1));

                list.remove(1);
                System.out.println(list);

                list.removeAllElements();
                System.out.println(list.isEmpty());
                }
}
```

Out put

[10, 11, 12, 13, 14]

5

11
[10, 12, 13, 14]

true