Test Case 1: testInstantiateConstructor()

Operation	Purpose	Object State:	Expected Result
EditableTextLine t1= new EditableTextLine("Julian");	To create an EditableTextLine using a user-supplied String value.	length=6; capacity=80	EditableTextLine with user-defined values
t1.length();	To verify instantiation and accessor method		Length=6
t1.capacity();	To verify the instantiation and accessor method		Capacity=80

Test Case 2: testInstantiateAtCapacity()

Operation	Purpose	Object State:	Expected Result

EditableTextLine t1= new EditableTextLine("computerscience+ computerscience+ computerscience+ +computerscience +computerscience +compu");
 	
t1.length();
 	
t1.capacity();
	To create an EditableTextLine using a user-supplied String value the same size of default capacity.
	
	To verify instantiation and accessor method
	
	To verify the instantiation and accessor method
		Length=80
		Capacity=80
			EditableTextLine with user-defined values
			
			Length=80
			
			Capacity=80

Test 3: testInstantiateAboveCapacity()

Operation	Purpose	Object State	Expected Result
EditableTextLine t1=new EditableTextLine("computerscience+ computerscience+ computerscience+ computerscience+ computerscience+ computerscience");	To create an EditableTextLine using a user-supplied String value greater than the size of the default capacity	Length=90 Capacity=160	EditableTextLine with user-defined values
t1.length();	To verify instantiation and accessor method		Length=90
t1.capacity();	To verify the instantiation and accessor method		Capacity=160

Test 4: testAppend()

Operation	Purpose	Object State	Expected Result
EditableTextLine t2 = new EditableTextLine ("Julian”);	To create an EditableTextLine using a user-supplied String value that has a length greater in value than the default capacity	Length=18 Capacity=80	An EditableTextLine with user-defined values Length=18 Capacity=80
t2.append(“ is my name.”);	To append a String fragment to the EditableTextLine		
t2.length();	To verify the instantiation and accessor method.		
t2.capacity();	To verify the instantiation and accessor method.		

Test 5: testAppendAboveCapacity()

Operation	Purpose	Object State	Expected Result
EditableTextLine t = new EditableTextLine ("Julian”);	To create an EditableTextLine using a user-supplied String value that has a length greater in value than the default capacity	Length=90 Capacity=160	An EditableTextLine with user-defined values
t1.append(“is my name. Hiiiiiiiiiiiiiiiiiiiiiiiiiiiiii+ iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii”);	To append a String fragment to the EditableTextLine String. Test append method that goes over capacity		Length=90 Capacity=160
t1.length();	To verify the instantiation and accessor method.		
t1.capacity();	To verify the instantiation and accessor method.		

Test 6:testInsertBeginning()

Operation	Purpose	Object State	Expected Result
EditableTextLine t2 = new EditableTextLine (" is my name.”);	To create an EditableTextLine using a user supplied String	String= “Julian is my name.” Length=18 Capacity=80	An EditableTextLine with user-defined values String= “Julian is my name.” Length=18 Capacity=80
t2.insert(0,“Julian”);	To insert a String fragment to EditableTextString at the given index		
t2.toString();	To verify the instantiation of insert method to EditableTextLineString		
t2.length();	To verify the instantiation and accessor method.		
t2.capacity();	To verify the instantiation and accessor method.		

Test 7: testInsertEnd()

Operation	Purpose	Object State	Expected Result
EditableTextLine t2 = new EditableTextLine ("12345”);	To create an EditableTextLine using a user supplied String	String= “123456789” Length=9 Capacity=80	An EditableTextLine with user-defined values String= “123456789” Length=9 Capacity=80
t2.insert(4,“6789”);	To insert a String fragment to EditableTextString at the given index		
t2.toString();	To verify the instantiation of insert method to EditableTextLineString		
t2.length();	To verify the instantiation and accessor method.		
t2.capacity();	To verify the instantiation and accessor method.		

Test 8: testInsertMiddle()

Operation	Purpose	Object State	Expected Result
EditableTextLine t2 = t2=new EditableTextLine("12346789");	To create an EditableTextLine using a user supplied String	String= “123456789” Length=9 Capacity=80	An EditableTextLine with user-defined values String= “123456789” Length=9 Capacity=80
t2.insert(4,"5");	To insert a String fragment to EditableTextString at the given index		
t2.toString();	To verify the instantiation of insert method to EditableTextLineString		
t2.length();	To verify the instantiation and accessor method.		
t2.capacity();	To verify the instantiation and accessor method.		

Test 9: testInsertAboveCapacity()

Operation	Purpose	Object State	Expected Result
EditableTextLine t1 = new EditableTextLine ("Julian”);	To create an EditableTextLine using a user-supplied String value that has a length of a greater value than the default capacity	String= “Juliannnnnnnnnnnn+ Nnnnnnnnnnnnnnnnnnnnnn+ Nnnnnnnnnnnnnnnnnnnnnnn+ nnnnnnnnnnnnnnnnnnn+ nnnnnnnnnn”);	An EditableTextLine with user- defined values.
		length=95	Length = 95
t1.insert(5, “nnnnnnnnnnnnnnnnnnn+ nnnnnnnnnnnnnnnnnnnnnnnnnnnnnn+ nnnnnnnnnnnnnnnnnnnnnnnnnnnnnn+ nnnnnnnnnn”);	To insert a String fragment to the EditableTextLine String. Tests the expansion of capacity with a fragment that goes over the default capacity	capacity=160	Capacity = 160
t1.toString();	To verify the instantiation of insert method to EditableTextLineString		
t1.length();	To verify the instantiation and accessor method.		
t1.capacity();	To verify the instantiation and accessor method.		

Test 10: testReplaceBeginning()

Operation	Purpose	Object State	Expected Result
EditableTextLine t1 = new EditableTextLine (“Hi friend!”);	To create an EditableTextLine using a user supplied String	String= “Hello” Length=5 Capacity=80	An EditableTextLine with user-defined values. String= “Hello”
t1.replace(0,10, “Hello”);	To replace a String fragment to the EditableTextLine String at the given start index and end index.		Length = 5 Capacity = 80
t1.toString();	To verify the instantiation of the replace method to the EditableTextLine String		
t1.length();	To verify the instantiation and accessor method.		
t1.capacity();	To verify the instantiation and accessor method.		

Test 11:testReplaceEnd()

Operation	Purpose	Object State	Expected Result
EditableTextLine t1 = new EditableTextLine (“Hey!”);	To create an EditableTextLine using a user supplied String	String= “Heyo” Length=4 Capacity= 80	An EditableTextLine with user-defined values. String= “Hello” Length = 5 Capacity = 80
t1.replace(3, 4, “o”);	To verify the instantiation of the replace method to the EditableTextLine String		
t1.toString();	To verify the instantiation of the replace method to the EditableTextLine String.		
t1.length();	To verify the instantiation and accessor method.		
t1.capacity();	To verify the instantiation and accessor method.		

Test 12: testReplaceMiddle()

Operation	Purpose	Object State	Expected Result
EditableTextLine t1 = new EditableTextLine (“Hey!”);	To create an EditableTextLine using a user supplied String	String = “Hey friend!” Length= 11 Capacity=80	An EditableTextLine with user-defined values. String= “Hey friend!”
t1.replace(3, 4, “ friend !”);	To verify the instantiation of the replace method to the EditableTextLine String		Length = 11
t1.toString();	To verify the instantiation of the replace method to the EditableTextLine String.		Capacity = 80
t1.length();	To verify the instantiation and accessor method.		
t1.capacity();	To verify the instantiation and accessor method.		

Test 13: testReplaceAboveCapacity()

Operation	Purpose	Object State	Expected Result
EditableTextLine t1 = new EditableTextLine ("Julian”);	To create an EditableTextLine using a user supplied String	String=” “Juliannnnnnnnnnn+ nnnnnnnnnnnnnnnnnnnnnn+ nnnnnnnnnnnnnnnnnnnnnnn+ nnnnnnnnnnnnnnnnnnnn+ nnnnnnnnnn”	An EditableTextLine with user-defined values. String= “Juliannnnnnnnnnn+ Nnnnnnnnnnnnnnnnnnnnn+ Nnnnnnnnnnnnnnnnnnnnn+ nnnnnnnnnnnnnnnnnnn+ nnnnnnnnnn”
t1.replace(5, 6,“nnnnnnnnnnnnnnnnnn+ nnnnnnnnnnnnnnnnnnnnnnnnnnnnn+ nnnnnnnnnnnnnnnnnnnnnnnnnnnn+ nnnnnnnnnn”);	To verify the instantiation of the replace method to the EditableTextLine String		Length = 95
t1.toString();	To verify the instantiation of the replace method to the EditableTextLine String.		Capacity = 160
t1.length();	To verify the instantiation and accessor method.		
t1.capacity();	To verify the instantiation and accessor method.		

Test 14:testInsertIllegal()

Operation	Purpose	Object State	Expected Result
EditableTextLine t1 = new EditableTextLine ("Computer”);	To create an EditableTextLine using a user-supplied String value that has a length of a greater value than the current/default capacity of the EditableTextLine.	String= “Computer” Length=8 Capacity=80	An EditableTextLine with user-defined values. TextLineIndexOutOfBounds Exception
t1.insert(-1, “Science”);	To insert a String fragment to the EditableTextLine String at an illegal index value that is < 0.		TextLineIndexOutOfBounds Exception
t1.insert(100, “Science”);	To insert a String fragment to the EditableTextLine String at an illegal index value at an index > length of the String.		

Test 15:testReplaceIllegal()

Operation	Purpose	Object State	Expected Result
EditableTextLine t1 = new EditableTextLine ("Computer”);	To create an EditableTextLine using a user-supplied String value that has a length of a greater value than the current/default capacity of the EditableTextLine.	String= “Computer” Length=8 Capacity=80	An EditableTextLine with user-defined values. TextLineIndexOutOfBounds Exception
t1.replace(-1,100,“Science”);	To replace a String fragment to the EditableTextLine String at an illegal index value at an index < 0.		TextLineIndexOutOfBounds Exception
t1.replace(0,100, “Science”);	To replace a String fragment to the EditableTextLine String at an illegal index value at an index > 0.		

Test 16:testEqualsTrue

Operation	Purpose	Object State	Expected Result
EditableTextLine t1 = new EditableTextLine ("Julian”); EditableTextLine t2 = new EditableTextLine ("Julian”);	To create an EditableTextLine using a user supplied String	Length=6 Capacity=80 Length=6 Capacity=80	An EditableTextLine with user-defined values.
t1.equals(t2);	To test equals method when it does equal		True
t2.equals(t1);	To test equals method when it does equal		True

Test 17:testEqualsFalse

Operation	Purpose	Object State	Expected Result
EditableTextLine t1= new EditableTextLine ("Julian”); EditableTextLine t1= new EditableTextLine ("Juliann”);	To create an EditableTextLine using a user supplied String	Length=6 Capacity=80 Length=7 Capacity=80	An EditableTextLine with user-defined values.
t1.equals(t2)	To test equals method when it does equal		False
t2.equals(t1)	To test equals method when it does equal		False