Homework 12

1.

```
public static <T> int size(BinaryTree<T> t) {

	BinaryTree<T> left = new BinaryTree1L<T>;
	BinaryTree<T> right = new BinaryTree1L<T>;
	int sizeL = 0;
	int sizeR = 0;

	t.disassemble(left, right);

	if (left != null) {
		sizeL = size(left);
	}
	if (right != null) {
		sizeR = size(right);
	}

	return sizeL + sizeR + 1;

}
```

2.

Same thing but iterative

```
public static <T> int size(BinaryTree<T> t) {

	BinaryTree<T> left = new BinaryTree1L<T>;
	BinaryTree<T> right = new BinaryTree1L<T>;
	BinaryTree<T> temp = t;
	int sizeL = 0;
	int sizeR = 0;
	t.disassemble(left, right);

	while (left != null) {
		sizeL = size(left);
		left.disassemble(
	}

	temp.disassemble(left, right);

	while (right != null) {
		sizeR = size(right);
	}

	return sizeL + sizeR + 1;

}
```