test.txt

```
Hello there
What is going on
0123456789101112131415161718192021222324252627282930313233343536373839404142434445464748495051525354
5556575859606162636465666768697071727374757677787980
That was over 80 chars easily

What about a new paragraph?

01234567891011121314151617181920212223242526272829303132333435363738394041424344454647484950515
 253545556575859606162636465666768697071727374757677787980
That should have split earlier because there was a " "
```

example_code/Interaction.java

```java
package socialmedia;

/**
 * An abstract class for Post, Comments and Endorsements to extend.
 * Allows the storage of each of them inside a single ArrayList
 *
 * Also contains a static integer for finding the last created interaction to
 * save computation.
 * Used to prevent re-use of deleted account comments.
 *
 * @author Jack Bundy
 * @version 1.0
 */
public abstract class Interaction implements java.io.Serializable {
    // Used to be an interface but lastCreatedInteractionId was needed
    // to NOT be final.
    // The lack of database is so great /s

    private Integer id;
    private Integer ownerId;
    /**
     * static integer for the last created interaction ID.
     * For finding out what the next ID should be in timeline
     */
    public static Integer lastCreatedInteractionId = 0;

    /**
     * Constructor for Interaction
     *
     * @param ownerId
     */
    public Interaction(Integer ownerId) {
        this.id = ++lastCreatedInteractionId;

        this.ownerId = ownerId;
    }

    /**
     * Get interaction ID
     *
     * @return Interaction ID
     */
    public Integer getId() {
        return id;
    }

    /**
     * Get interaction owner ID
     *
     * @return Interaction Owner ID
     */
    public Integer getOwnerId() {
        return ownerId;
    }

    /**
     * Sets a new owner ID
     *
     * @param ownerId
     */
    public void setOwnerId(Integer ownerId) {
        this.ownerId = ownerId;
    }
}

```

example_code/Post.java

```java
package socialmedia;

import java.util.ArrayList;

/**
 * A class for posts. It store its message, id, comments, and endorsements.
 * Comments extend this class.
 *
 * @author Jack Bundy
 * @version 1.0
 */
public class Post extends Interaction {
    private String message;
    private ArrayList<Comment> comments = new ArrayList<Comment>();
    private ArrayList<Endorsement> endorsements = new ArrayList<Endorsement>();

    /**
     * Post constructor
     *
     * @param ownerId
     * @param message
     * @throws InvalidPostException
     */
    public Post(String message, Integer ownerId) throws InvalidPostException {
        super(ownerId);

        if (message.isEmpty() || message.length() > 100) {
            throw new InvalidPostException();
        } else {
            this.message = message;
        }
    }

    /**
     * Get list of comment IDs
     *
     * @return arraylist of comment IDs
     */
    public ArrayList<Comment> getComments() {
        return comments;
    }

    /**
     * Set the comment IDs
     *
     * @param comments
     */
    public void setComments(ArrayList<Comment> comments) {
        this.comments = comments;
    }

    /**
     * Add a new comment to the end of the list
     *
     * @param comment_id
     */
    public void addComment(Comment comment) {
        comments.add(comment);
    }

    /**
     * Get list of endorsement
     *
     * @return array list of endorsement IDs
     */
    public ArrayList<Endorsement> getEndorsements() {
        return endorsements;
    }

    /**
     * Set the endorsement IDs
     *
     * @param endorsements
     */
    public void setEndorsements(ArrayList<Endorsement> endorsements) {
        this.endorsements = endorsements;
    }

    /**
     * Add new id to endorsement ids
     *
     * @param endorsement
     */
    public void addEndorsement(Endorsement endorsement) {
        endorsements.add(endorsement);
    }

    /**
     * Sets a new post message
     *
     * @param message
     * @throws InvalidPostException
     */
    public void setMessage(String message) throws InvalidPostException {
        if (message.isEmpty() || message.length() > 100) {
            throw new InvalidPostException();
        } else {
            this.message = message;
        }
    }

    /**
     * Gets the Post message
     *
     * @return
     */
    public String getMessage() {
        return message;
    }
}
```

example_code/Comment.java

```java
package socialmedia;

// And this is a super long comment to test formatting
// 01234567891011121314151617181920212223242526272829303132333435363738394041424344454647484950515253545556575859606162636465666768697071727374757677787980
```

```
/**
 * A class for comments. Stores comments and endorsement IDs that are made
 * relating to it by inheriting them from Post.
 *
 * @author Jack Bundy
 * @version 1.0
 */
public class Comment extends Post {
    Integer commentedPost;

    /**
     * Constructor for Comment.
     *
     * @param message
     * @param ownerId
     * @param commentedPost
     * @throws InvalidPostException
     * @throws PostIDNotRecognisedException
     */
    public Comment(String message, Integer ownerId, Integer commentedPost)
            throws InvalidPostException, PostIDNotRecognisedException {
        super(message, ownerId);
        // Comment is almost functionally the same as post
        this.commentedPost = commentedPost;
    }

    public Integer getCommentedPost() {
        return commentedPost;
    }
}
```