Question 1:

https://github.com/cameron-mccawley/HW7-fizz-buzz

Question 2:

https://github.com/cameron-mccawley/HW7-leap-year

Question 3:

The component I will be focusing on is the ability to comment on a post:

For a TDD, the idea would be to create tests that match the functional requirements of our component before writing our implementation, and when writing our code, writing it in a way so that our tests will pass. As we continue to build our component, we continue to write tests with increasing functionality that we can then write implementations for. This allows for a working product at all times of implementation, and can help drive development with a focus on requirements.

For example, with our social media system, users must have the ability to post comments on other people's posts. Here is a scenario of how TDD would be implemented with such a component.

- Create a test that checks if the user is redirected to the comment page when clicking on comments
- Write code to redirect users to comment box when clicking the comment button
- Create a test that checks that a comment is added to a post when the post comment button is clicked
- Write code to add comment to the post database and have it display underneath tweet
- Create a test that checks if liking a comment increments its like counter
- Write code to add a like button and add functionality to it so that it increments when a
 user clicks on it
- Create a test that adds a reply to the comment and checks that it displays when posted
- Write code for a reply feature that allows users to reply to comments and have it be displayed underneath the original comment