Assignment 2

To Be Submitted by Sunday October 11

- a zipped copy of your NetBeans project to the dropbox
  - use File > Export Project > To ZIP
  - the name of this file should be yourName_a2.zip

Programming Style

- this is to be an individual effort
  - do not work with anybody to complete the assignment
- follow the programming style outlined in the text Chapter 1.7
  - use at least two line comments and two block comments
  - use proper indentation and spacing
  - use either End-of-line or Next-line style

Note:

- up to 40% of the mark will be based on the appearance and ease of use of the program
- the program ends with
  - the appropriate calculation
  - or an error message if the user enters invalid data such as a negative number
  - your name and student number should always appear as the last line of output
- use debugging (step through code) to make sure that invalid data is not processed
  - for example, if user enters a negative number, that number should not be used to calculate radius

Basic Code Requirements

- the first lines of your code should contain (not in main method)

```
/**
Your Name
Your Student Number Assignment 2
Date
*/
```

- create a project called TheShape that
  - prompts the user to type in a
    - 1 for a Triangle calculation
    - 2 for a Rectangle calculation
    - 3 for a Circle calculation
    - any other number ends the program without any calculation

- Triangle Calculations
  - prompt user for height and base
  - print out Triangle area
  - formula is: area = .5 * height * base

- Rectangle Calculations
    - prompt user for width and length
    - print out the Rectangle's area and perimeter
    - formulas
        - area = length * width
        - perimeter = 2 * (length + width)

- Circle Calculations
    - prompt user for the radius
    - print out the Circle's diameter
    - formula is: diameter = 2 * radius

- at some point in the program
    - you must use the conditional operator at least once

Note:

- if user types in a negative number then
    - inform the user that negative numbers not allowed
    - the program then should not prompt for more input
    - the program should not print out any calculations
- do not use System.exit, return or break to end the program
- use comments to help explain your code
- use variable names that help to explain your code