Assignment 8

Q1. Define a new exception, called ExceptionLineTooLong, that prints out the error message "The strings is too long". Write a program that reads a String from user and calculates its length. and throws an exception of type ExceptionLineTooLong in the case where a string of length is more than 80 characters.
(Hint- Use String class length() method)

Q2. Build a new Circle class with the following basic features:

- Attributes:
    o Center point - Build instance variables for the circle's center point (use Point2D class object).
    o Diameter - Build an instance variable for the circle's diameter (myDiameter also represented as a double value).
- Behaviors
    o Default constructor - Build a default constructor that initializes the circle's center point to (0, 0) and its diameter to 100.
    o Provide a setter method that can set value to diameter.
    o The circle's diameter should always be non-negative. If the diameter is negative then throw user defined exception.