

Assignment 07

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:
 - Center point - Build instance variables for the circle's center point (use `Point2D` class objetc).
 - Diameter - Build an instance variable for the circle's diameter (myDiameter also represented as a double value).
- Behaviors
 - Default constructor - Build a default constructor that initializes the circle's center point to (0, 0) and its diameter to 100.
 - Accessor methods - Build accessor methods for the two center coordinates and the diameter.
- Invariant
 - The circle's diameter should always be non-negative. maintain the integrity of each circle object by ensuring that the class invariant (that the diameter should be non-negative) is true at all times.
 - If the diameter is negative then throw user defined exception.

Q3. Write a java program to reverse a `String`

Q4. Write a java code to check string is palindrome.