# SunBeam Institute of Information Technology

# Java Assignment 7

# Based on Exception Handling

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.

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

- Attributes:
    - Center point - Build instance variables for the circle's center point (myX and myY represented as double values).
    - 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.