Sofia University
Department of Mathematics and Informatics
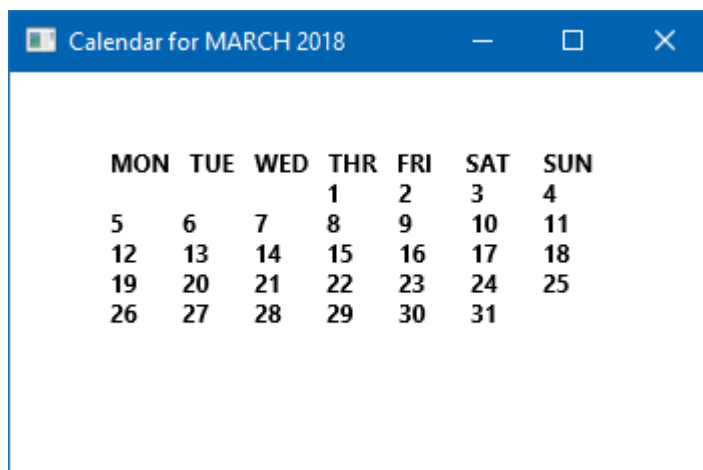
Course : AOOP part 1
Date: March 8, 2021
Student Name:
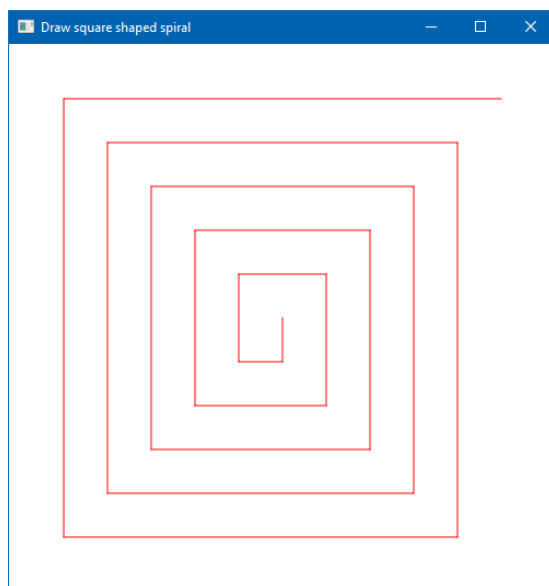
Homework No. 2

Problem No. 1

Write a JavaFX program that displays a calendar for a month. The program reads the number of the month and the year using a dialog input textbox in JavaFX. Display in Red color the date number, if it is the current date number at the time of displaying the Calendar.

Submit the solution as a **IntelliJ project**.

Problem No. 2

Write a JavaFX application to reproduce the following drawing. Submit the solution as an **IntelliJ project**

Problem No. 3

Write a `static` method `drawRandomNumber()` in a class to generate random integers from within [1;3] with the following probabilities:

P(1) = 0.2
P(2) = 0.3
P(3) = 0.5

where P(N) denotes the probability for the number N.

Test the method in the main() method of the class.

Call the method `drawRandomNumber()` in a loop 10,000 times and display the probability with which the method has returned 1,2 and 3. Display the probabilities as percentages using the methods of class `NumberFormat`.,

Call the method `drawRandomNumber()` in a loop 60,000 times and display the probability with which the method has returned 1,2 and 3. Display the probabilities as percentages using the methods of class `NumberFormat`.,