Assignment 02 – Due on 02/24/25, 11.59pm

Tasks

Question 1

Complete Exercise 2.1 from the textbook (page 58). Name the main .java file as **square.java**

Question 2

Complete Exercise 3.4 from the textbook (page 88). Do not prove by assigning numerical examples. Instead, keep the variables as they are and provide algebraic proof.

Question 3

Compute the pixel co-ordinates for a circle centered at (0,0) with radius r = 8. Show all the steps involved (follow class example), compute and mark the pixels for the full circle (not just one octant) on the blank pixel grid (attached).

Instructions for Submission:

1. Place the written Java source program for question 1, the solution for question 2 and 3 (in a pdf document only. **No .docx files**) and any required files for successful running of question1 in **one single folder**.
2. Inside the folder, verify if the following commands work
    a. javac square.java
    b. java square or java square.java (depends on the os)
3. Zip the folder as firstname_lastname.zip (with an underscore) (e.g. jason_smith.zip). Submit your ZIP file via eLearning by the deadline.
4. Violation of instructions results in 10 pt deduction.