

## Assignment 01 – Due on 02/10/25, 11.59pm

### Tasks

#### Question 1

Work on Exercise 1.3 from the textbook (page 25). Write a java program for this exercise, isotropic mapping mode should be used.

#### Question 2

Compute the pixel co-ordinates for lines 1 and 2 given below using

i) DDA algorithm ii) Bresenham algorithm

Line1: ( $x_p = 2$ ,  $y_p = 1$ ) to ( $x_q = 7$ ,  $y_q = 5$ )

Line 2: ( $x_p = 0$ ,  $y_p = 8$ ) to ( $x_q = 5$ ,  $y_q = 1$ )

Show all the steps involved and mark the computed pixels on the blank pixel grid (attached) for each case.

#### Instructions for Submission:

Combine the written Java source program "*lines.java*" for question 1 and the solution for question 2 into a single ZIP file. Use your firstname\_lastname (with an underscore) to name your ZIP file (e.g. jason\_smith.zip). Submit your ZIP file via eLearning by the deadline.

Additional instructions from the course TA:

- Submit the additional required .java files for successful compilation and running of the main scripts
- Non programming questions should be submitted in .pdf file format
- Include a readme.txt file describing the contents of the .zip file and any special compilation, running instructions if necessary.