Vavuniya Campus of the University of Jaffna

Second Examination in Information Communication Technology - 2017

(Technology Stream)

Second Semester - March/April 2019

TICT2253-Computer Graphics (Practical)

Answer All Questions

Time Allowed: Two hours

Instructions

- Save your files in the folder named with your *Index Number (TS10XX).*
- Save a screenshot of your final output in the above folder.
- You may refer to the output image of Figure 7 in the folder named *TICT2253* on the desktop.

1. (a) Write a Java program to implement the *DDA line drawing algorithm.* [10%]

   (b) Create Object 1 as shown in Figure 1 by using the program written in part(a) and obtain Object 2 as shown in Figure 2 using any appropriate 2-D transformation technique applying on Object 1.

[*This question is continued on the next page*]

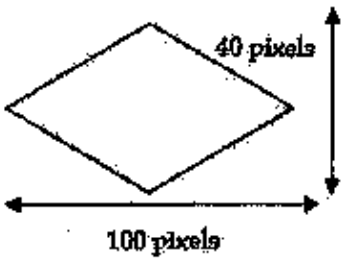

Figure 1: Object 1

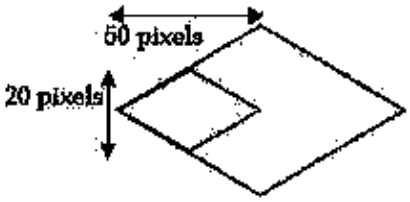

Figure 2: Object 2

[20%]

(c) Create the Object 3 as shown in Figure 3 by applying any suitable 2-D transformation on Object 2, constructed in part (b).

Figure 3: Object 3

[20%]

(d) Obtain an object as shown in Figure 4 and construct the composite object as shown in Figure 5 by applying any appropriate transformation on the Object 4.

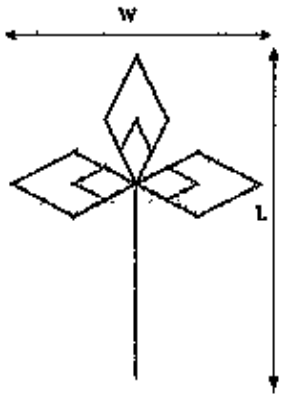

Figure 4: Object 4

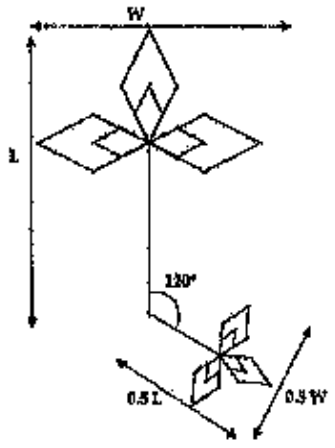

Figure 5: Object 5

[30%]

(e) Create the Object 6 as shown in Figure 6 by using the methods available in java.awt.Graphics class and 2-D transformations techniques.

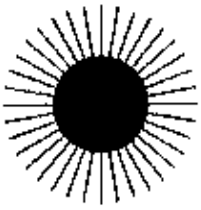

Figure 6: Object 6

[20%]

Note:- The final graphics output must be similar to Figure 7. You may refer to the image of Figure 7 in the folder named *TICT2253* on desktop.

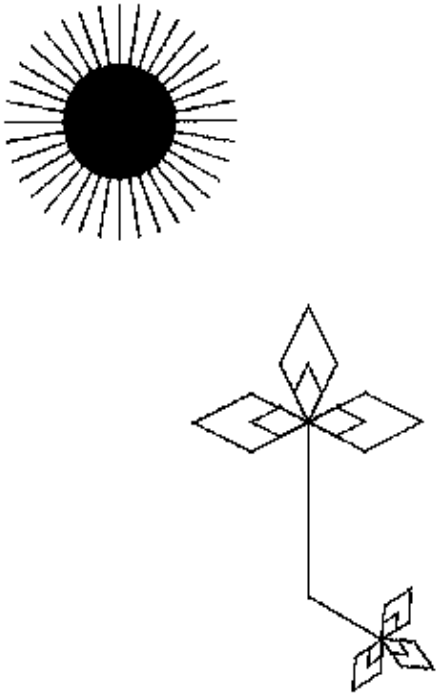

Figure 7: Final output