COME103 / CENG111 Computer Programming I

Lab - 2 Before LAB Examples

6 October 2021

1. TRUE / FALSE QUESTIONS

_____The `turtle.size(width, height)` command is used to specify a size for the graphics window.

2. COMPLETION QUESTIONS: Fill in the blanks.

a) The _____ statement is used to set the window's background color.

3. ALGORITHM WORKBENCH QUESTIONS

a) Write a turtle graphics statement that draws a circle with a radius of 75 pixels.

b) Write the turtle graphics statements to draw a square that is 100 pixels wide on each side and filled with the color blue.

MULTIPLE CHOICE QUESTIONS

4. The Python turtle is initially positioned in the _____ of a graphics window and it first appears, by default, to be heading _____.

a) center, up
b) top left corner, east
c) bottom left corner, down
d) center, east

PROGRAMS

5. Write a python program for a bank teller. In your program the user will enter the amount of the money to be withdraw as integer number. Then your program will calculate how many from each banknotes will be given. The program should aim to give minimum number of banknotes. Assume that available banknotes are 1, 10, 20, 50 and 100$.

For example, if the inputted value is `3237` then the program should say

```
100s:      32
 50s:       0
 20s:       1
 10s:       1
  1s:       7
```

Hint: *You may try using // or % in your program to determine the banknotes.*

Example Program Output

```
Enter how much money to be withdrawn: 1267
100s:    12
 50s:     1
 20s:     0
 10s:     1
 1s :     7
```

6. Use the turtle graphics library and write a program that reproduce the following object shown in the figure. You may choose size of the square shape as 200 pixel and radii of the circles as 50 pixels.