GCIS 123

Practicum 1

Instructor: Gahyun Park

- 1. (40%) Create a module named "Boolean.py" and add the following functions:
- 1) def max 2(x, y):
- Return the maximum value of x and y.
- 2) def max 3 (x, y, z):
- Return the maximum value of x, y, and z.
- In order to receive full credit, you should only use max 2 without using the if statement.
- 3) def grade (score1, score2):
- Return a letter grade that is computed based on the specified <code>score1</code> and <code>score2</code> as follows:

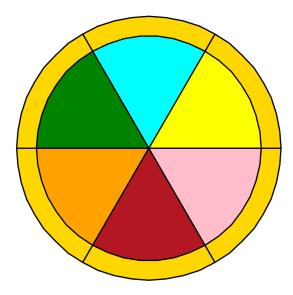
Condition 1	Condition2	Grade
The average of the scores is at least 90.	Both scores are at least 85.	'A'
	One of the scores is lower than 85.	'B'
The average of the scores is at least 80 and lower than 90.	Both scores are at least 70	'C'
	One of the scores is lower than 70.	'D'
The average of the scores is at least 70 and lower than 80.	Both scores are at least 60	'E'
None of the previous conditions met		'F'

Note that both conditions must be met to get a grade higher than an 'F'.

- 4) You may define a main function to manually test the functions you wrote.
- 5) Call main using

- 2. (10%) Crete a test module named "grade_test.py" and test the grade function. You will test each of the following calls:
 - 1) grade (90, 92) \rightarrow 'A'
 - 2) grade (100, 82) → 'B'
 - **3)** grade (72, 90) → 'C'
 - 4) grade (100, 69) \rightarrow 'D'
 - 5) grade (100, 50) \rightarrow 'F'

3. (50%) Draw a pizza that has been cut into six equal pieces:



Open the provided "pizza.py" module and implement the following functions to it.

- 1) def a piece(x, y, radius, color): draws a single piece.
- (x, y) is the center of a pizza.
- radius is the size of a piece of pizza.
- -color is used to fill the piece.
- 2) def six_pieces(x, y, radius, color): draws 6 pieces with the specified color.
 - (x, y) is the center of a pizza.
 - radius is the size of a piece.
 - color is the color of the pizza crust.
- 3) def $six_colorful_pieces(x, y, radius)$: draws 6 pieces with different colors.
 - (x, y) is the center of the pizza.
 - radius is the size of a piece.
 - 4) def a pizza(x, y, radius, color): draws an entire pizza.
 - (x, y) is the center of the pizza.
 - radius is the size of the pizza.
 - color is the color of the pizza crust
 - 5) def main():

A main is provided for you to test your functions. You may change the turtle's speed or tracer and comment/uncomment the code in main as you test.