**INTERNATIONAL UNIVERSITY VNUHCM**

PRINCIPLES OF PROGRAMMING LANGUAGES

# LAB 6. PYTHON: OOP AND EXCEPTION HANDLING

**PURPOSE:** After this lab, you are able to use Python object-oriented programming approach

**EXERCISES:**

L65E1. Practise Python OOP approach, including *Python Classes/Objects* and *Inheritance:*

https://www.w3schools.com/python/python_classes.asp
https://www.w3schools.com/python/python_inheritance.asp

L6E2. Practise Python Exception Handling:

https://www.w3schools.com/python/python_try_except.asp

L6E3. Apply OOP, Python Collections and Exception Handling to manage a collection of shapes, including lines, rectangles, squares, circles, and triangles (and other shapes of your interest).

The number of shapes, the shape types, and basic sizes of a shape are inputted by users.

You are required to do the following tasks:

1. Calculate areas of all the given shapes (if any).
2. Calculate circumference of all the given shapes (if any)
3. Draw the shapes using the stars (as described in Lab 1, Exercise 2).