***** Do not forget to include *"independent completion form"* *****

Instructions

To work on HW5:

• build a HW5directory under your home directory (cs103sp22)

• start Jupyter Notebook and from dashboard navigate to hw5 folder

• create hw5.ipynb in hw5 folder

• in the notebook, create the myName and myBlazerID functions which returns your name and your blzerid (the same function you had in hw1)

• Create docstrings for each function (-2 points for each missing docstrings)

• once you are confident that your code works, submit on Canvas

Mandatory Functions

The following functions should be implemented, and the return statements should be modified with the correct credentials. Do not forget to call the functions

```
def myName():
    return "James Bond"
def myBlazerID():
    return "jbon12"

# Call these functions
print("My Name is =", myName(), " and my BlazerId is =",myBlazerID())
```

Objectives:

- Turtle Graphics

Create the necessary helper functions to solve the problem below.

Homework Instructions

We will implement a Python Turtle program that randomly chooses a **shape** from the list below, generate a random **color**, and define a random **size** to draw it on random **location** of the screen.

Here are the shapes that you should randomly choose from:

- Square (each side is n pixel)
- Circle (radius is n pixel)
- Rectangle (width= 2*n pixel, height=n pixel)
- Equilateral Triangle (each side is n pixel)
- Regular Pentagon (each side is n pixel)

For each run:

- your code should choose a random shape from the list above **[25 points]**
- generate a random integer value for n value (for each n → 25<n<100) **[25 points]**
- generate a random color to fill in the shape; use RGB color system (Hints: generate three random int between 0 and 255) **[25 points]**
- Generate a random location to start drawing your shape (random x and y coordinate values, make sure you limit them to fit on the screen) **[25 points]**

Example runs:

Rectangle (80x40), color(200,125,58), location(x=35,y=-10)

Circle (r=12), color (0,32,55), location (-15,36)

Deliverables: `hw5.ipynb` and `independent_completion_form`

Bonus Points: Random color for the shape (the drawings not to fill in) +10 points

Random star shape, each side is n pixel, +10 points