Among Us

Python Programming Assignment

Your Task:

In this assignment, you will be creating a number (inputted by the user) of random color Among Us characters on your screen. You are welcome to get as creative as you wish with the design of your characters, although they should look like among us characters.

You will need to make use of the following commands:

- Forward   [MYP: 2]
- Backward   [MYP: 2]
- Right   [MYP: 2]
- Left   [MYP: 2]
- Goto   [MYP: 2]
- Up   [MYP: 3]
- Down   [MYP: 3]
- Begin_fill   [MYP: 3]
- End_fill   [MYP: 3]
- Numinput   [MYP: 4]
- Fillcolor   [MYP: 5 (If using RGB)]
- Random.randint   [MYP: 6]
- Circle   [MYP: 7] (if using rounded corners)
- Others discussed or not discussed in class   [7]

Using commands not discussed in class, will award the highest grade. To gain a level 8 on this assignment, you must use *functions with arguments and parameters* being passed through, use at minimum *3 additional commands not discussed in class* and create *a background for the characters to be placed over*!

Things to Note:

- If you use commands not discussed in class, please note this in your submission comments so I ensure I find it in the code and award you the correct grade.
- Just because you have the commands above in your code, does not ensure the grade beside it, they must be used properly and have a purpose.
- Ensure code is well commented and efficient (aka, using loops when appropriate rather than extra code, using variables to store numbers you're using often like screen size, etc)

Submitting:

Please submit assignment to the teams assignment which will be created. Submit code as a .py file and a screenshot of your final product. **Please do not submit screenshots of the code.**

Getting you started:

Here is some code to get you started, along with a sample output.

```python
import turtle # allows us to use turtle
import random # allows us to use random

### Initialize startup for program ###
s = turtle.Screen() # initializes screen
s.setup(1200,800) # sets size of canvas
s.colormode(255) # Allows us to use RGB for colors
draw = turtle.Turtle() # initializes turtle
draw.speed(0) # sets speed so its quick
s.bgcolor("grey") # sets background color
draw.pencolor("black") # sets pen color
draw.pensize(5) # sets pen size
### ------------------------------- ###

# Function to draw among us character
def drawAmongUs():...

# Function to draw the glass on the among us character
def drawGlass():...

# This allows the user to type in an input!
y = int(s.numinput("Among Us!","Please input how many Among Us characters you want: "))

#Loop y times (I would leave the loop until the end when you have one among us character created)
# Hint: You will need to use random in here for the location and the color (R,G,B)
for x in range(y):...

turtle.done() # always end with a turtle.done()
```
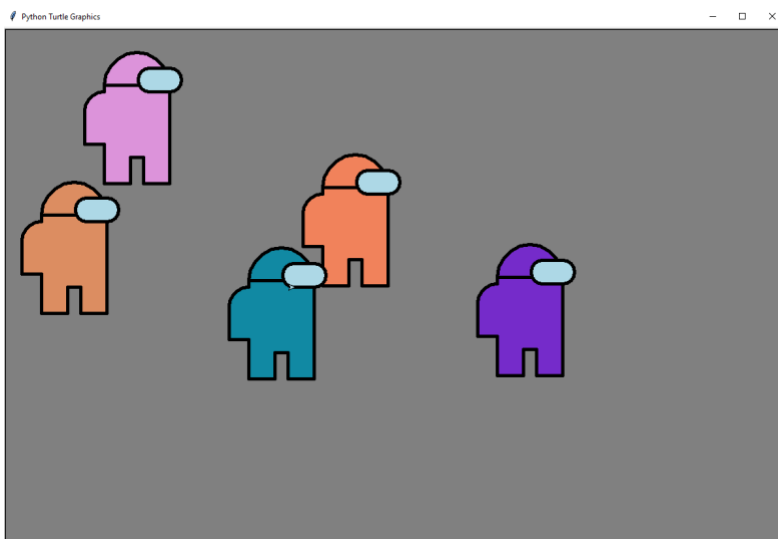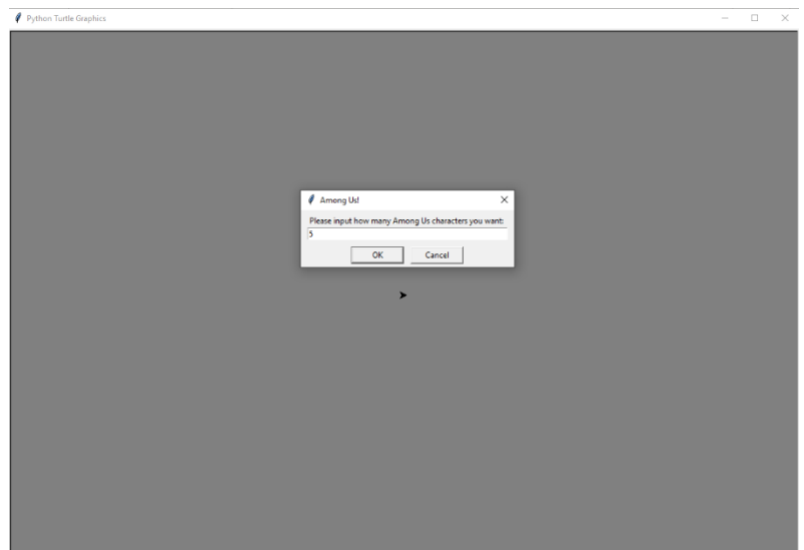
Marking Rubric

Key Concept: Python Among Us
Unit: 3
Date: January 2022
Due: _____

OSSD % OSSD Grade MYP	< 50% 0 1-2	50-60% 1 3	60-70% 2 4	70-80% 3 5	80-90% 4 6	90-96% 4 7	>96% 4 8
Knowledge and understanding Of Content	Very limited or not complete	Demonstrates limited knowledge of content	Demonstrates some knowledge of content	Demonstrates considerable knowledge of content	Demonstrates thorough knowledge of content		
Use of Critical/Creative thinking processes	Very limited or not complete	Uses critical thinking processes with limited effectiveness	Uses critical thinking skills with some effectiveness	Uses critical thinking skills with considerable effectiveness	Uses critical thinking skills with a high degree effectiveness		
Program Comments and Style	Very limited or not complete	Uses conventions, style, and comments with limited effectiveness	Uses conventions, style, and comments with some effectiveness	Uses conventions, style, and comments with considerable effectiveness	Uses conventions, style, and comments with a high degree effectiveness		
Final Grade							
Comments							