Emoji Pics Classwork

Instructions:

1. Locate the emoji\_pics.py file on your **Desktop**
2. Right click on the file and choose Open With -> Thonny
3. Start to type your Python program
4. Occasionally save and test your program to **make sure it works**
5. Every time that the directions say take a screenshot, take a screenshot of your latest emoji pic and leave it on the Desktop.

Write a program at the bottom of the emoji\_pics.py file that accomplishes each of the tasks below. **Do not change any** of the supplied variables since they contain the data that will create the emoji pics. Instead, you should add code **below** all the variables.

Task 1: Black and White Pictures

For the following tasks, you can use/copy the black and white emojis at the top of the file.

Create a program that uses a loop to print out each character from the string stored in the bw\_emoji\_pic\_1 variable one by one.

Create a program that uses a loop to print out a white/black emoji for each “1”/”0” and a newline for each “2” from the bw\_emoji\_pic\_1 variable.

Take a screenshot of the previous result.

Use the program you just created to print out the picture stored in the bw\_emoji\_pic\_2 variable.

Alter the program so it prints out the negative of the picture (black where it was white and white where it was black).

Take a screenshot of the previous result.

Task 2: Grayscale Pictures

For the following tasks, you can use/copy the gray scale emojis at the top of the file.

Create a program that uses a loop to print out each two-digit tuple (pairs) of characters from the string stored in the grayscale\_emoji\_pic\_1 variable two by two. For example, it should print out “11” then “10” then “01”.

Create a program that uses a loop to print out an emoji pic based on the two-digit tuples that represent grayscale values. For example, 10 would be light gray. 22 is a newline. Use the program to print out the picture stored in the grayscale\_emoji\_pic\_1 variable.

Take a screenshot of the previous result.

Use the program you just created to print out the picture stored in the grayscale\_emoji\_pic\_2 variable.

Add code to create a black border around the image you just output.

Take a screenshot of the previous result.

Task 3: Color Pictures

For the following tasks, you can use/copy the color emojis at the top of the file.

Create a program that uses nested loops to print out the emoji pic stored in the color\_emoji\_pic\_1 variable. Each pixel in the picture is represented by a three-digit tuple that represent RGB values. For example, 101 would be magenta. The dimensions of the picture are 21x40.

Take a screenshot of the previous result.

Use the program you just created to print out the picture stored in the color\_emoji\_pic\_1 variable. Experiment to find out the proper dimensions.

Take a screenshot of the previous result.

Task 4: Get Creative

Make your own emoji pic that’s at least 5x5 and has more than one color. Once you’re done, email it to me and I will include it in the lesson for next year’s class.