ES432 6 Week Practice Exam
Points illustrate the relative importance of each topic.

Don't worry the actual exam will be shorter than this but it will cover the same topics with similar point distributions.

1.) (5 pts) Using Git:
Clone this repository from
https://gitlab.com/ES432/six_week_practice_exam.git
Create a README file with your name and the date

2.) (20 pts) Arduino + Serial:
Complete the Arduino sketch in `rgb_hw/rgb_hw.ino`. Three buttons are connected to Digital Pins 2,34. If the 'p' character is received over serial, print the state of the buttons as a comma separated list of 1's and 0's. For example if the 1st and 3rd buttons are pressed print `1,0,1`

3.) (30 pts) Python:
Complete the Python script `exam.py`. It should display a 400x400 window with a gray background and the text "ES432 Practice Exam" underline centered at the top of the window. Make the script executable.

4.) (20 pts) Objects:
Complete the class defined in `rgb_led.py`. This class simulates an RGB LED.

5.) (20 pts): Putting it all together
When the user presses a button on the arduino, light up the corresponding element of the LED. Pin 1 controls red, Pin 2 controls green, and Pin 3 controls blue.

6.) (5 pts) Using Git:
Publish your work on github.
DO NOT PUSH YOUR CODE UNTIL AFTER THE EXAM!!!

+5 points if you demonstrate this code using your kit before the exam.