Cole Hudson 2/8/2015 AP Computer Science

12.02 Real World Recursion

Explain how you use the principal of recursion to create your image.

- 1. I first divided up the space into two large sections. One of complexity and one of simplicity.
- 2. I then kept splitting each section until I had it broken down as far as I wanted it.
- 3. After that I went through and colored each section so that it followed the white space guidelines

Briefly describe a plan for how you might write a program to produce Mondrian art.

- 1. Choose a random corner to be the complex corner, make the opposite one the simple corner.
- 2. "Randomly" place vertical and horizontal lines in each area. "Random" is dependent on which corner it is: complex or simple. There will be more lines placed in complex than simple.
- 3. Go through each rectangle and randomly color it one of the available colors. This random is also dependent on the 2:1 ratio.

Who should get the copyright credit for a piece of computer art: the CPU, the software, or the programmer? Explain your reasoning.

I think that the programmer should get the copyright for any piece of computer art. They were the one who instructed the CPU what to do. The paintbrush doesn't get credit, the artist does. A computer is merely a medium by which the programmer creates art.

Mystery message on index card explained.

Message:

"Pass this card forward. Tell the person in front of you a number one greater than the number just told to you. If you weren't told a number, say "one." If there is no one in front of you, then turn around, flip the card over so the instructions can't be seen, and tell them to pass it to the back of the line."