Sreeya Gambhirrao
02/05/2022
APCS A(B)

Real World Recursion

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

What I did was I took a "canvas" that was pretty medium-sized. I decided to split the canvas into thirds horizontally. Then I decided to put vertical lines and then more horizontal lines in between them. I continued this process in between each rectangle. This would be an example of recursion because I am doing the same thing(adding lines) over and over again until I feel satisfied with my art.

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

Plan: What I was thinking is I would create some variables that corresponded to the length and width of the rectangles. Then, I would use maybe some kind of random number generator to generate random numbers for width and height so that different sizes of rectangles are formed. I don't know how would color them but maybe there is some type of paint or fill function.

1. Create a canvas by its width and height
2. Create a rectangle and initialize its height and width
3. Use a random number generator to generate random numbers for height and width
4. Make sure those new rectangles generated from the random number generated are within the canvas
5. If they are within the canvas, then good.
6. If not within the canvas, then do not include that rectangle
7. Use some type of color/paint function to fill in certain rectangles
8. Display the art

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

I feel like the programmer should be the one to receive copyright credit. The programmer is the one who created this art piece. The CPU and software were just there going through the instructions. But the one who wrote the code is the programmer. It was their thinking and their creativity, not the CPU's or the software's. For example, if a programmer wrote code to create some art, and another programmer stole it and wrote the same code and claimed it as theirs, that meant that they copied the original programmer's code and thinking. It has nothing to do with the CPU or software. By default, they are there on every device. In conclusion, the programmer should be the one to receive copyright credit.

What was on the index card:

1. Pass this card to the very first person
2. First-person: Please tell your number in line and pass it on to the next person
3. People after the first person: please continue saying your number in line to the person behind you and pass it on