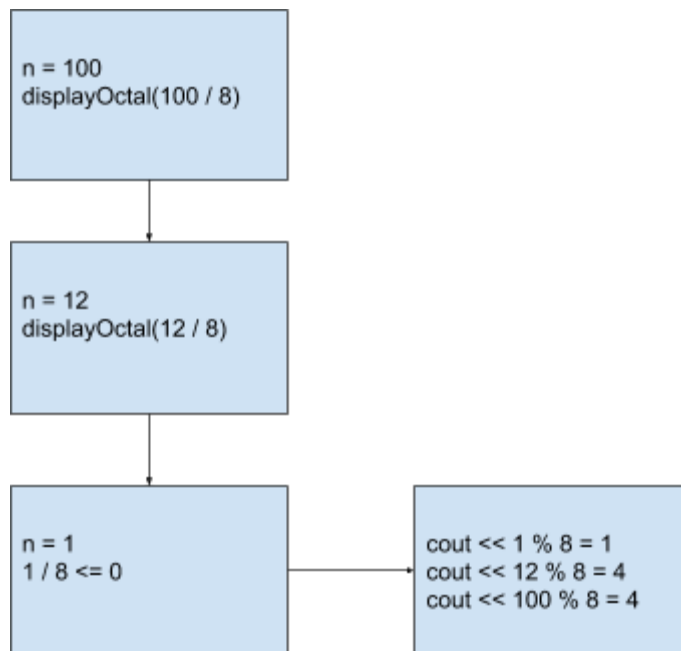


Jeremy Venne
Algorithms
Question 3

This function uses the division method of converting decimal to octal. In order to represent the number of divisions required, it uses a recursive strategy. The base case is that the function ends when the number inputted is zero. This means that all of the octal digits have been calculated. If the division of the number is greater than 0, it calls the function recursively with that number divided by 8 as an integer. It also outputs the remainder. This effectively outputs each remainder of each division, so the final octal number should be outputted when the function ends. Once this remainder reaches 0, there is no more divisions left to compute. Therefore, the function reaches its base case and ends.



Therefore, 144 is displayed