Davenport Hill III

Mr. Bryan Jones

Literate Programming

August 31, 2024

Coding with Reflection

Originally, when I was solving the program, The Power of Thor, using C++ in class, I went straight to programing without fully understanding what I needed to do. After reflecting, I realized that programming doesn’t just mean typing code on the computer. Also, it involves making sure I understand the problem by listing every valid piece of information and sketching out what the program wanted to do if I can.

Using this alternative approach, I reread all the information the program gave me and jotted down all the important bits and drew a sketch. The Power of Thor, through an infinite loop, wanted me to move Thor from his initial position to the light’s position optimally. He can move N, S, E, W, NE, NW, SE, SW by one cell every turn and can have a limit number of turns to reach to end. After writing everything down, I realized solving this requires creating separate if-else statements for each of the eight moves. While this was tedious and caused me to experience errors where Thor was moving the wrong direction, it all worked out. Understanding the problem and its requirements is necessary for any problem-solving. Without this, you will end up jumping into problems while not really understanding them. This can hinder and lengthen your program's time investment.

