1. A. bool pathway[8] = {[0] = true, [2]=true};

B. bool pathway[8] = {true, false, true};

1. Text

   Description automatically generatedText

   Description automatically generated

I believe that these two parts are the most important in the whole code of the number 2 question. Firstly, in the first photo, the main process of the code is to declare and initialize the adjacency matrix given in the question. What I did is to simply use designation initialization to initialize the value of 1 to the corresponding indexes inside the adjacency matrix. In the second photo, the main process involved is to evaluate each point whether it can meet the points C and D, which are charging stations. As you see, I initialized a start variable (Note: the start variable is the input of the user or the starting point) and a j variable. Next is I wrote a while condition, wherein unless the point is at 3 or 2, which are the corresponding points for the charging stations, or it surpasses the maximum index, then the loop will not exit. Inside that loop is an if condition, where I check whether the starting point does have a route to a charging station or not. And if it does, then the next point in the route would then become my new starting point. I repeat this until I arrive at a charging station point, which is what I wrote in the while condition. Also, if the maximum index is surpassed and the code still does not arrive at points C and D, then the loop will also exit. Then after I exit the while loop, I then print the corresponding output depending on the last point the loop was on.