My solution is base on the A\* search algorithm. Find each point’s weight and heuristic. First in my program is set up the goal array. And then get input from user and store it in a game array to compare with goal array. And then get the heuristic of each node. And also get the each node weight. Finally get the F function from the each node by add heuristic and weight. In my program, get the location of zero, and find out the zero can move to left or right or up or down. Moreover, get two lists which are call open list and close list. I trying to test the sample file 1 and sample file 2 from the assignment 2, it works. I also change the place base on sample file 1 and sample file 2, it also works. The only one cannot works I guess if the puzzle doesn’t have solution. If it doesn’t have solution the program will take maybe unlimited time to run it.