Project 1 Report

The main logic in this code prepared according to Version 3 is as follows:

Two maps are worked on. The first map is the one received from the user and the other map is our result map. First of all, according to the given dimensions, the same size space is created in the memory for both maps. When we examine the results of the game per second in the image below, we can see that the starting and ending situations occur every 4 seconds, and the map is full of bombs every 2 seconds. Therefore, after receiving the data from the user, we can take the mode of the given second according to 4 and get the result from the remainder. When the remainder is 1, we can print the initial map. When the remainder is 2 and 0, the map should be full of bombs, so we need to fill the resulting map with bombs and print it. When there are 3 remaining, we need to print the initial exploded state of the bombs. To do this, the result map must be filled with bombs, then we can fill the explosion locations of the bombs in the result map with "." according to the bombs in the starting map and print the result map.