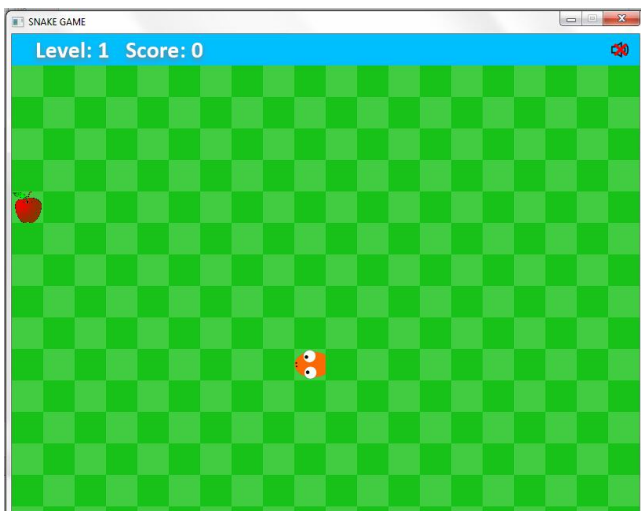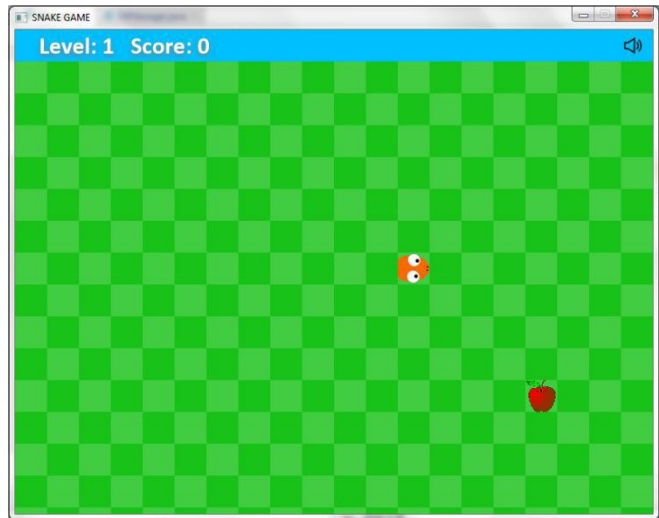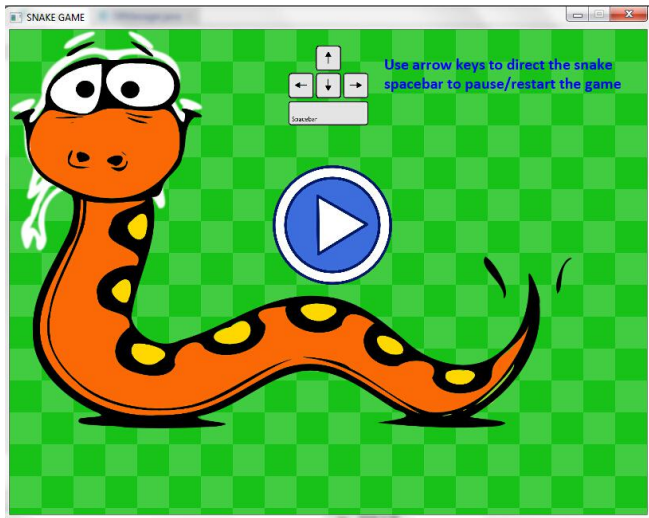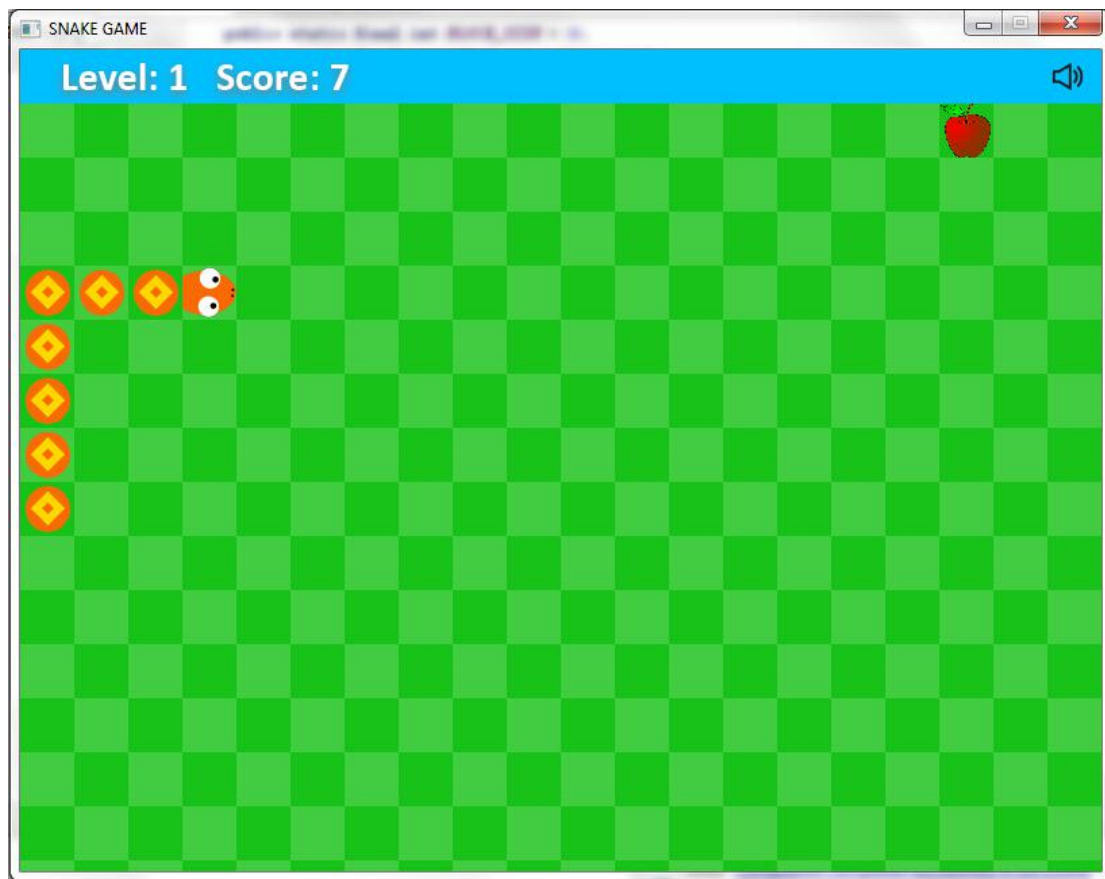**Testing case-1: basic control and functional**

The direction is correctly controlled by left/right or up/down.

The game is paused or unpaused by using the spacebar.

The sound effect is correctly played when actions are occur.

Sound on or off is successfully controlled by the icon.

Testing case-2: growth of snake segments

The snake grows 1 segment per apple, and the score increases by one.

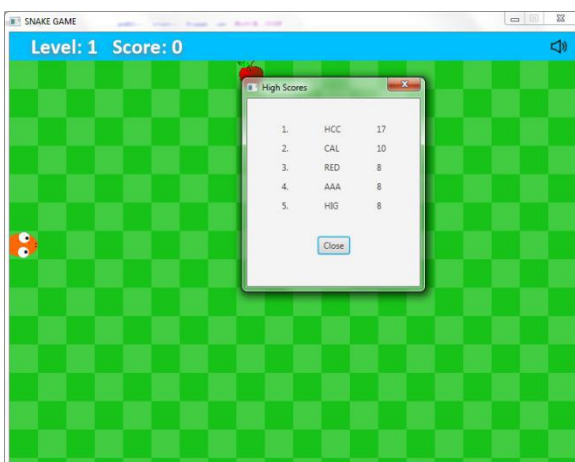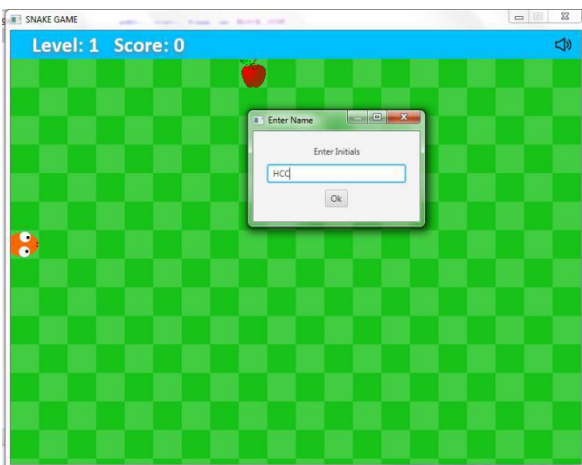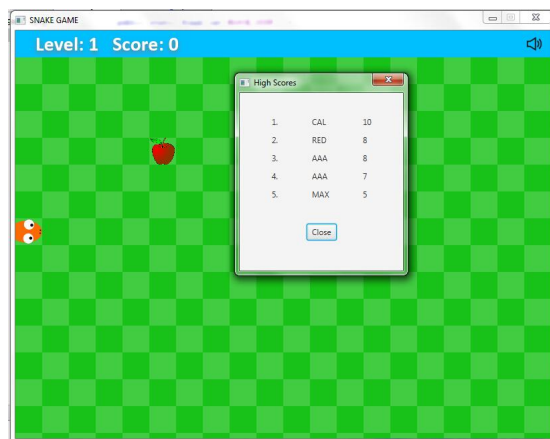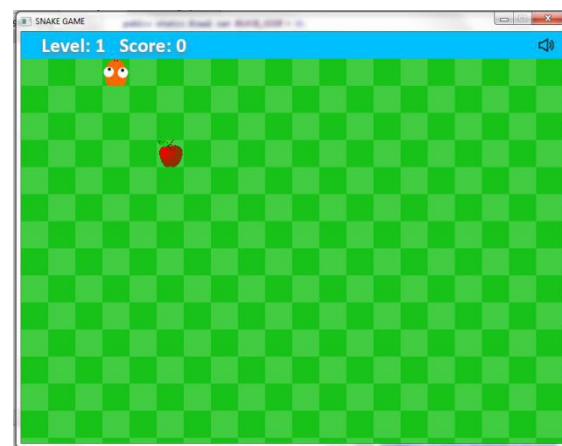The sound effect is correctly played when the event is occur.

Testing case-3: game end
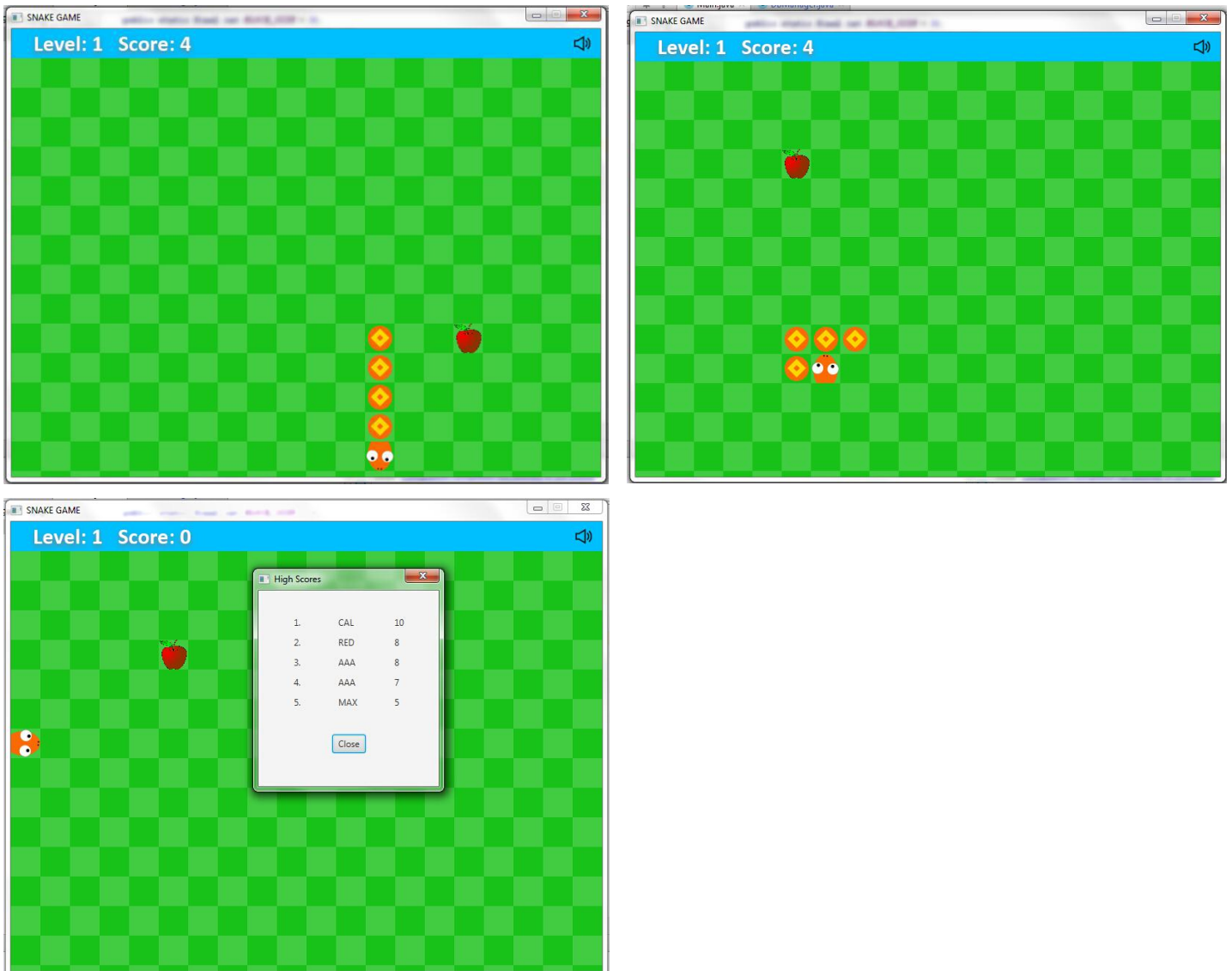
If the head reaches to the edge of window or to its body, the game end.

The history score is successfully loaded from database and popped up on the screen.
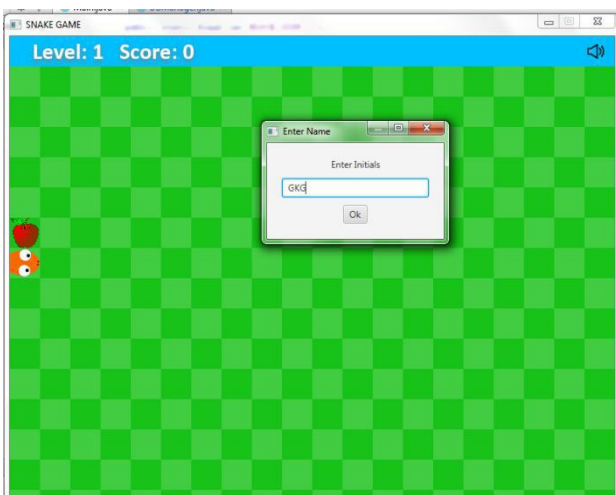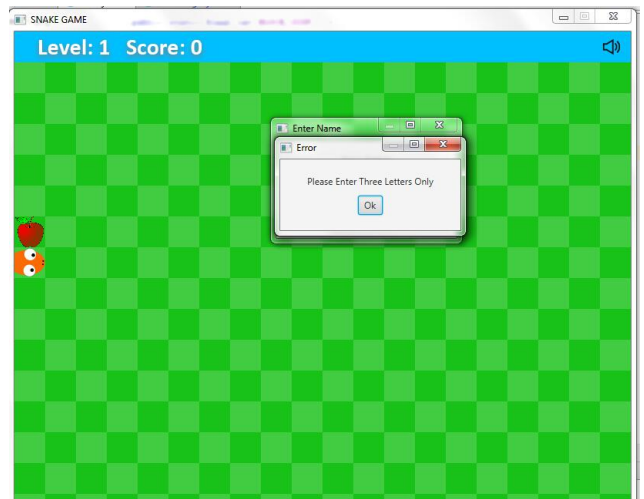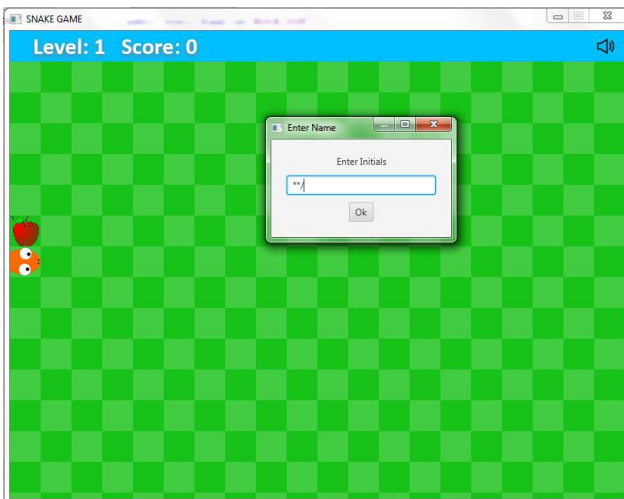
Testing case-4: score record

If the game end with low score, the history score is successfully loaded from database and popped up on the screen.
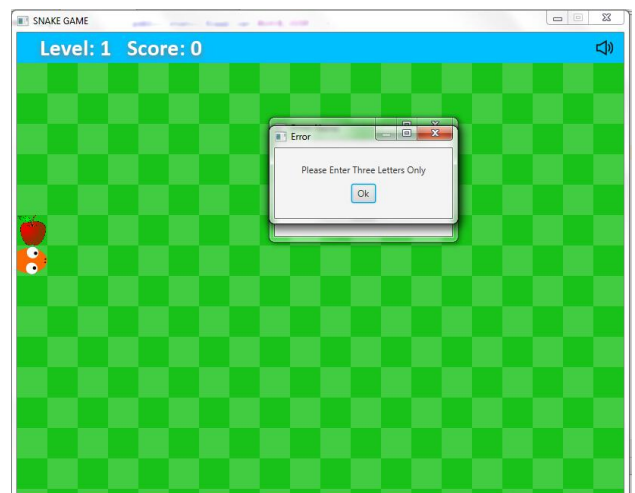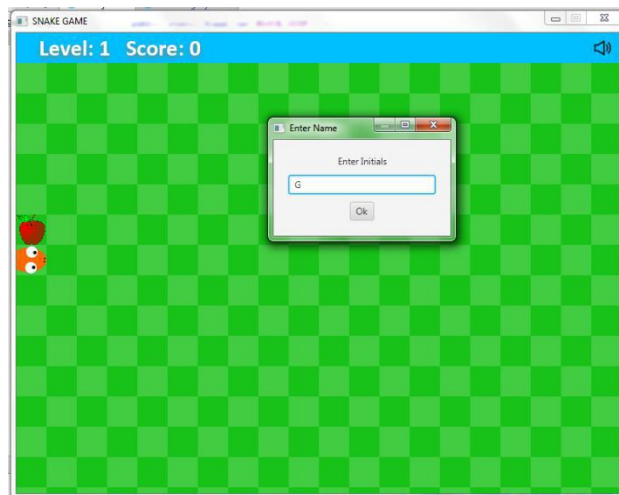
If the game end with high score, a test box is popped up and ask user to input a name. Then, the new score is recorded and shown on screen.

Testing case-5: input record name

The name of record has to be 3 characters.

If the record less than 3 characters, an message is popped up and ask user to input 3 characters.

If the record is not 3 characters, an message is popped up and ask user to input 3 characters.