RULES FOR KING AND ROOK CHESS ENDGAME

1. **IF** (initial-fact) **AND** user has called function (start-game) **THEN IF** black king has legal co-ordinates as user input **THEN** status "white move" **ELSE** reset game.

2. **IF** using current co-ordinates of pieces checkmate can be done **THEN** game resets **ELSE** status "black move".

3. **IF** back king has only 1 move to play **THEN** move black king's only move **AND** status is "black move done".

4. **IF** a move is done **AND** piece moved is black **THEN** modify co-ordinates of black king.

5. **IF** status "black move" **AND** black king has more than 1 move to play **THEN** ask for user input **AND** status "black move done".

6. **IF** conditions for mating move (black king is in corner and there is king opposition) **THEN** check if such mating move exists **IF** yes **THEN** status "white move done" **ELSE** status "white move ponder".

7. **IF** conditions for mating move (black king is on edge and there is full king opposition) **THEN** search for mate **IF** yes **THEN** status "white move done" **ELSE** status "white move ponder".

8. **IF** no mating conditions **THEN** think of other continuations **AND** status "white move ponder".

9. **IF** king opposition **AND** rook in between **AND** status "white move ponder" **THEN** execute waiting move with white king **AND** status "white move done".

10. **IF** king opposition, white king should not leave it **AND** status "white move ponder" **THEN** play best rook move **AND** status "white move done".

11. **IF** white king is on edge **AND** under nasty opposition but has a move to leave edge **AND** status "white move ponder" **THEN** move white king **AND** status "white move done".

12. **IF** rook is attacked **AND** white king is away **AND** status "white move ponder" **THEN** play best rook move **AND** status "white move done".

13. **IF** rook is attacked **AND** white king can defend it **AND** status "white move ponder" **THEN** play king move **AND** status "white move done".

14. **IF** none of the other pondering rules is applicable **AND** status "white move ponder" **THEN** choose a move among king **AND** rook best moves **AND** status "white move done".