

# ITRW222

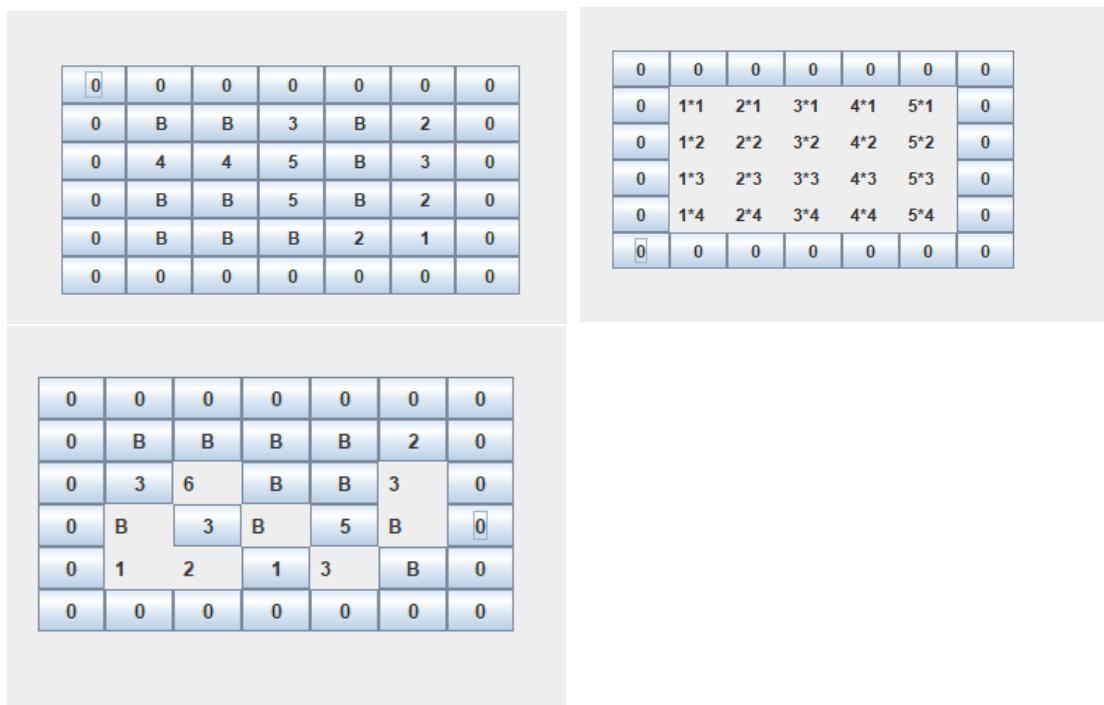
## PRACTICAL 4 MINESWEEPER

At least 4 hours of work!! Please start today!

You need to compute the value of the cell – that is – the number of bombs in a 3x3 region of each cell and print it. Test your program with many bombs in a smallish grid- I added a frame of ZEROS round the game! This sorts out all the special cases – the user should not be aware of the frame! This caused lots of changes to MS3! My grid is 2 rows and 2 columns larger!!

In practical 4 you need to do the following:

1. Understand why we need the “border” – without a thorough understanding of this you will not be successful! The answer has to do with 3x3 regions of cells on the border.
2. Enlarge the grid and the field with 2 rows and 2 cols – do not add 2 to ROWS and COLS – it will not work! Why? You need to change all your for-loops!
3. Make sure that your `toString()` in the `MSCell` class returns only one character – the correct label for the grid – and use it to display the text on the button/label! Your `toString` will contain various if-statements!
4. Change the for loops in your listeners – do not test for the border-buttons! In the left button set the use the `toString()` of the Cell to set the label value.



Not the images are not taken from the same game – the bombs are different 😊