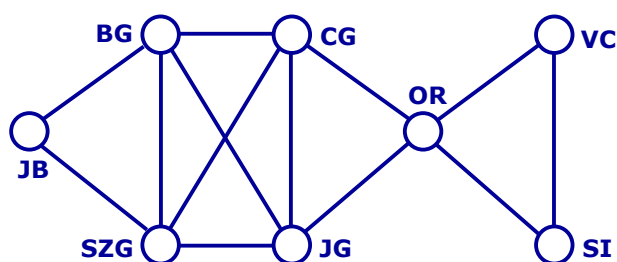## TP Activity 2: (10 minutes) [Graph Colouring]

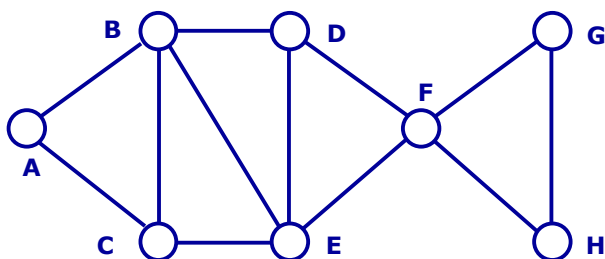**The Tourist Problem**                    **Your Name:** _____

The tourist problem instance in the lecture can be modeled with the following conflict graph. Two possible colorings of the graph are given in the lecture.

**Q1:** Give a *different* way to colour the vertices of the graph on the left. How many colours?
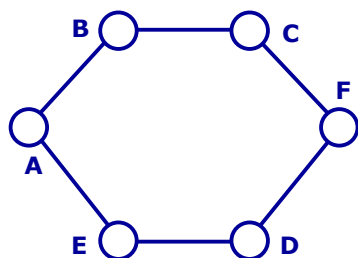


**Q1:  # colors:** _____

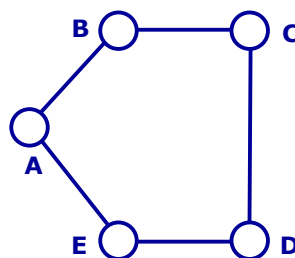**Q2:** What about this one?  **[NEEDS MORE MODIFICATIONS]**



   **Q2:  # colors:** _____

**Q3:** Try coloring the following graphs with the minimum number of colors.



   **Q3(a):  # colors:** _____          **Q3(b):  # colors:** _____