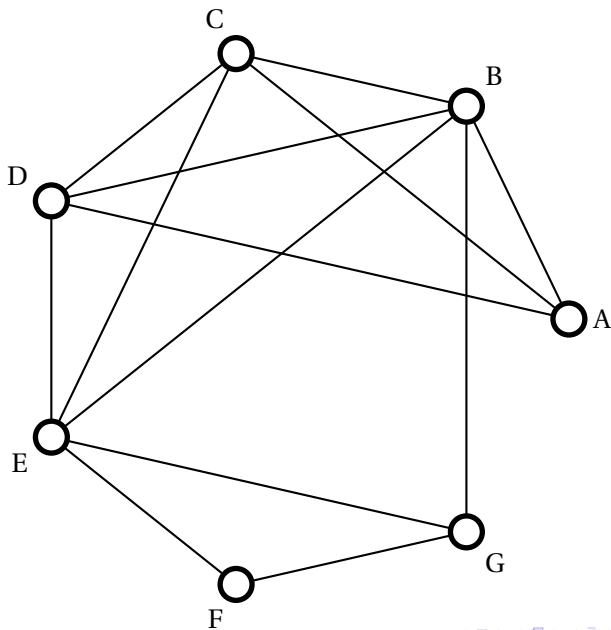


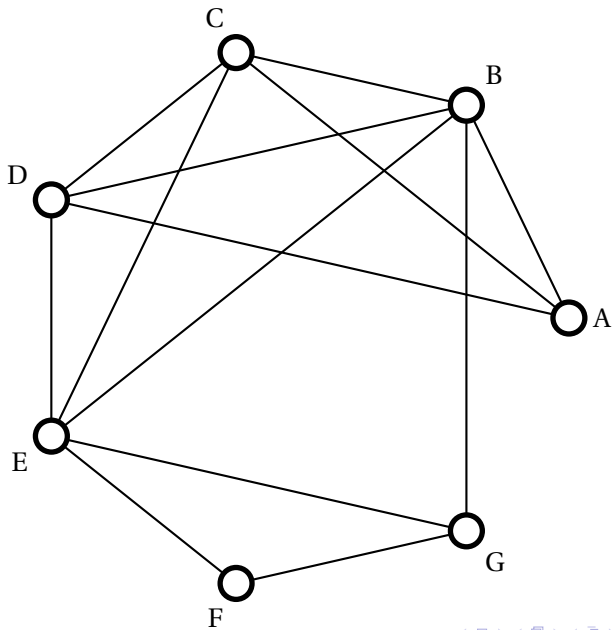
The Welsh Algorithm



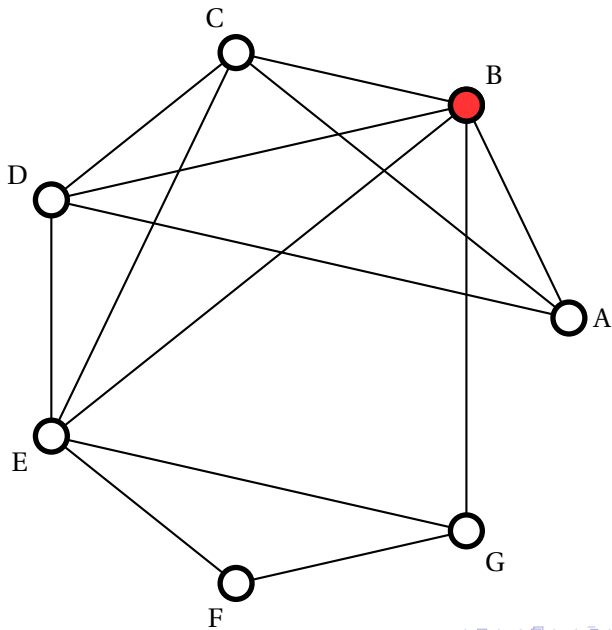
Sort the vertices in decreasing order of degree

<i>Vertices</i>	<i>Degree</i>
B	5
E	5
C	4
D	4
A	3
G	3
F	2

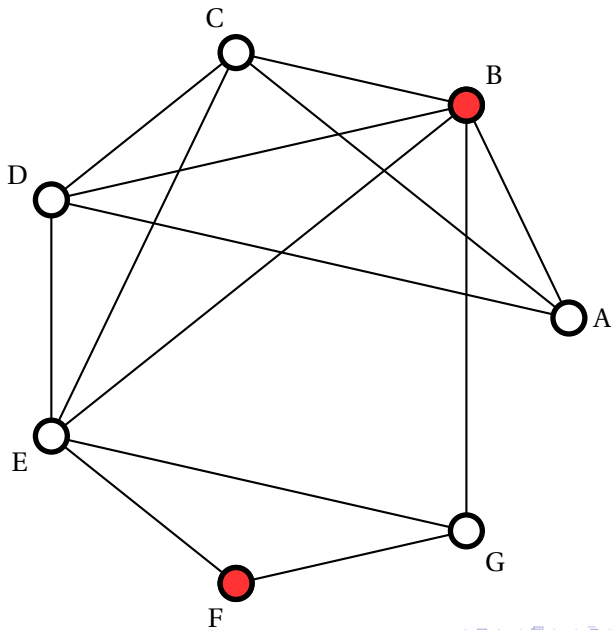
Coloring



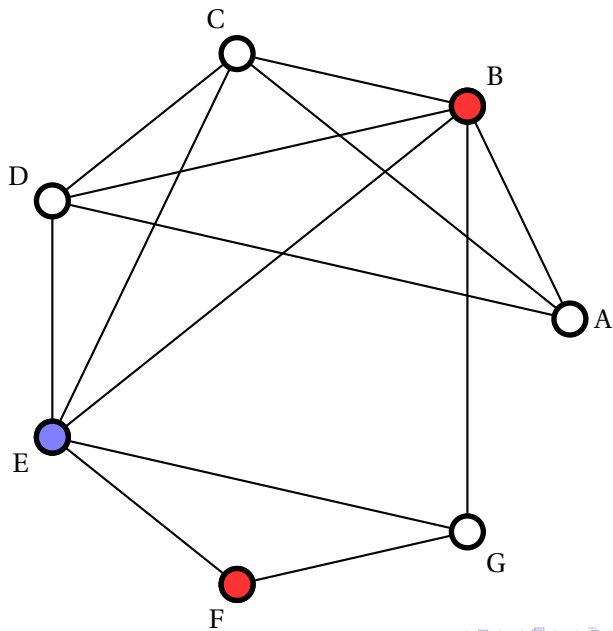
Coloring



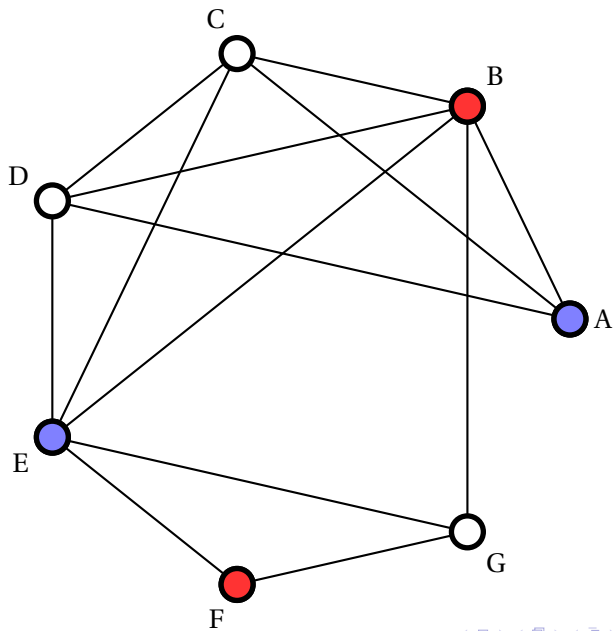
Coloring



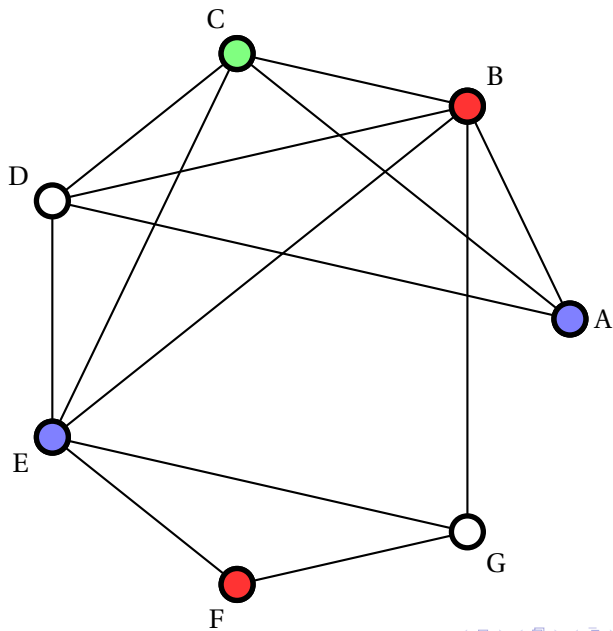
Coloring



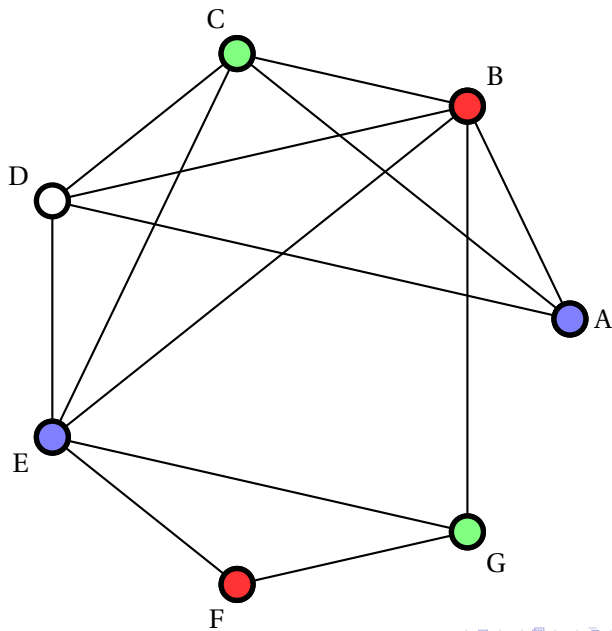
Coloring



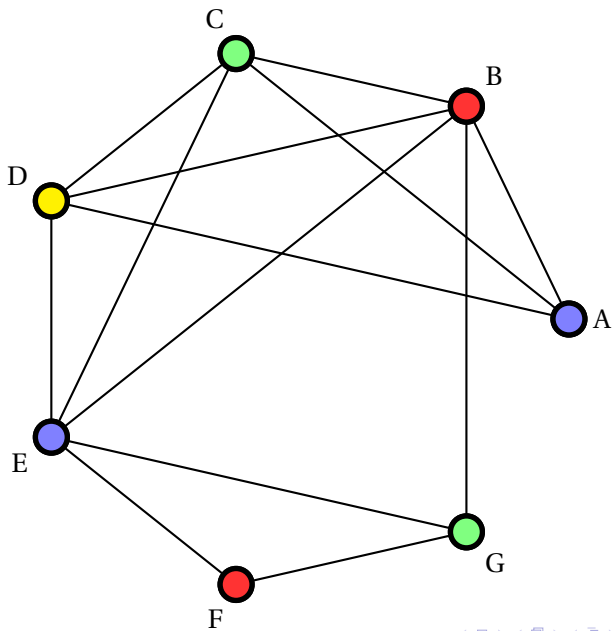
Coloring



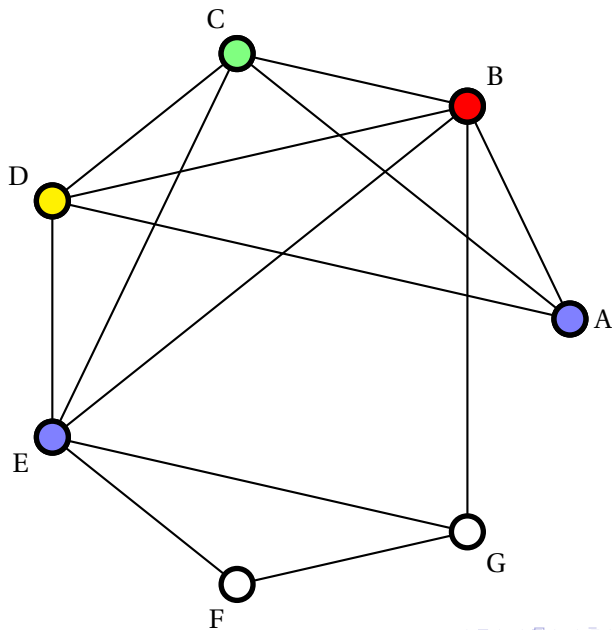
Coloring



Coloring



ABCD and BCDE are complete subgraphs of order 4.



Conclusion

The chromatic number χ is 4.