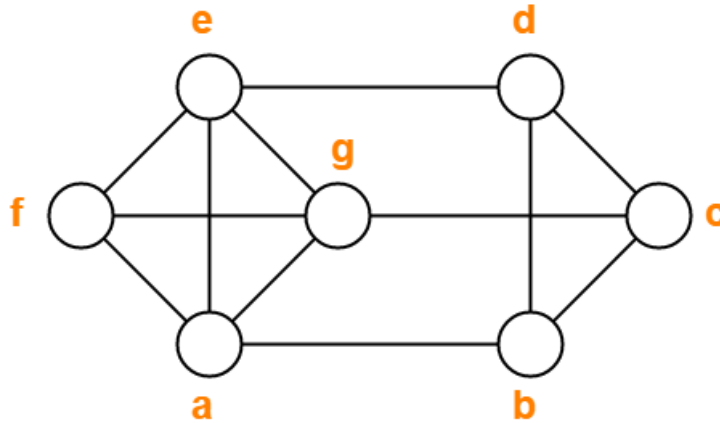


Assessment – 1

MCSE 502L Design and analysis of Algorithm (Lab Component)

1. Explain how graph coloring is done. Implement it for the following graph. Paste the code as well as the output.



2. Scheduling: A set of jobs are given that need to be assigned to time slots. Each job needs one such slot. Jobs can be scheduled in any order, but pairs of jobs may be in conflict in the sense that they may not be assigned to the same time slot, for example, because they both rely on a shared resource.

Explain with an example how graph coloring can be useful for the above-mentioned scheduling problem (in question no 2).