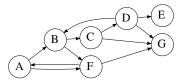1. Write your name below:

2. Trace the operation of DFS-VISIT(G, A) from the textbook (p. 565) on the following directed graph G using the conventions of Figure 20.4 (p. 566) of the textbook, adapted as follows. In particular:

   - Depict the state of the graph after each iteration of the for loop.
   - Annotate each vertex with its color: **W**hite, **G**ray, **B**lack. Use either the first letter of each color or use: single circle for white, double circle for grey, and box for black, as in class.
   - Record the discovery and finishing times in the format d/f.
   - Highlight tree edges using double lines, and annotate **F**orward, **B**ackward, and **C**ross edges.

3. Outline the operation of TOPOLOGICAL-SORT from the textbook (p. 573) on the graph of Question 2.

4. Depict the *strongly connected components* of the graph of Question 2.

5. (self study) Trace the operation of STRONGLY-CONNECTED-COMPONENTS from the textbook (p. 577) on the graph of Question 2.