University of Dhaka

Institute of Information Technology (IIT)

Bachelor of Science in Software Engineering (BSSE)

Course: **SE312 Theory of Computing (Section: B)**

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Lab 07

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1. Consider the following DFA in the figure:

	0	***1***
-> A	*B*	*A*
B	*A*	*C*
C	*D*	*B*
**** D***	*D*	*A*
E	*D*	*F*
F	*G*	*E*
G	*F*	*G*
H	*G*	*D*

Write a C program to:

i. Implement the table-filling algorithm to find all the pairs of equivalent states and print the table of distinguishabilities for the above DFA.

ii. Show the minimum-state equivalent DFA using the table.