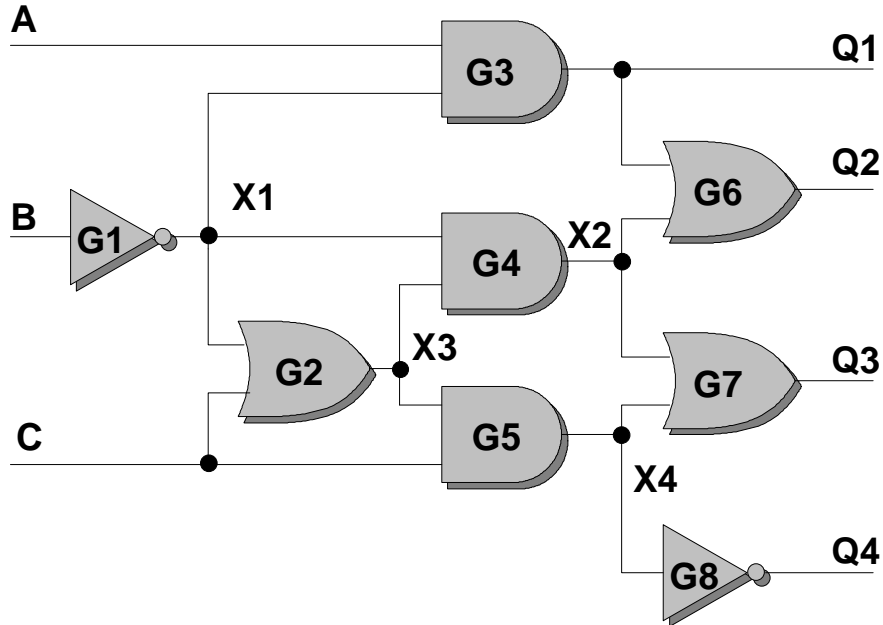


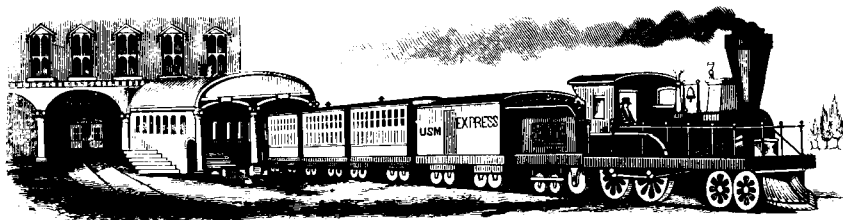
Name _____

1. Give the PC-Set for each Gate and each Net in the following network.
(20 Points)

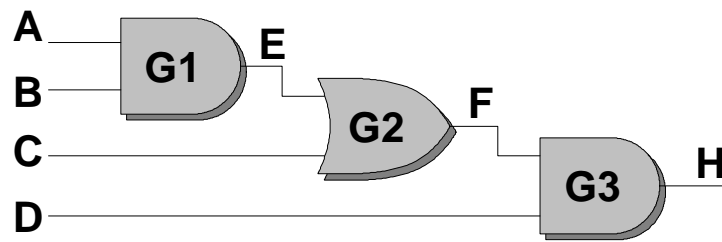


Gate	PC-Set
G1	
G2	
G3	
G4	
G5	
G6	
G7	
G8	

Net	PC-Set
A	
B	
C	
X1	
X2	
X3	
X4	
Q1	
Q2	
Q3	
Q4	



2. Using the PC-Set Method, show the generated code for the following circuit.
Remember to perform zero insertion where it is necessary. (20 Points)



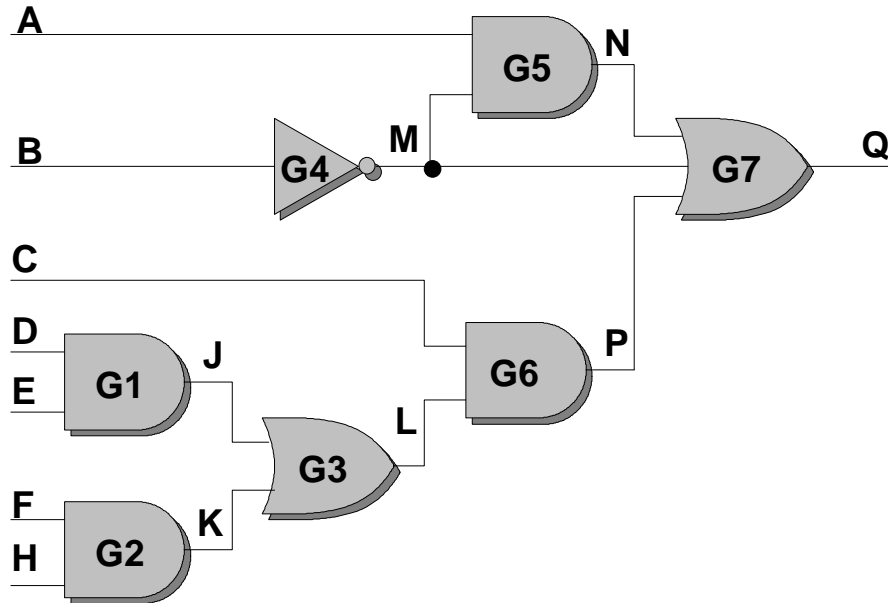
Variable Definitions:

Initialization Code:

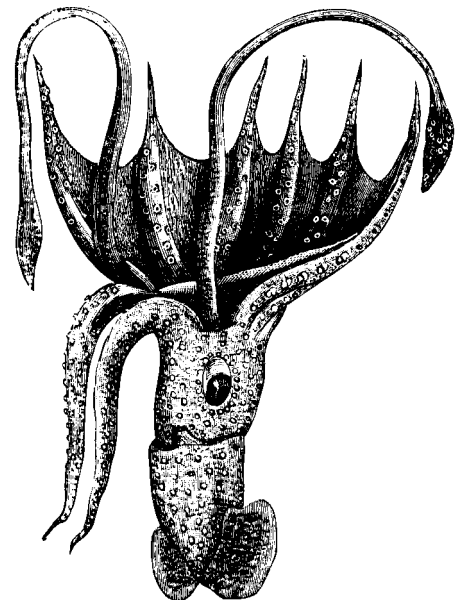
Simulation Code:



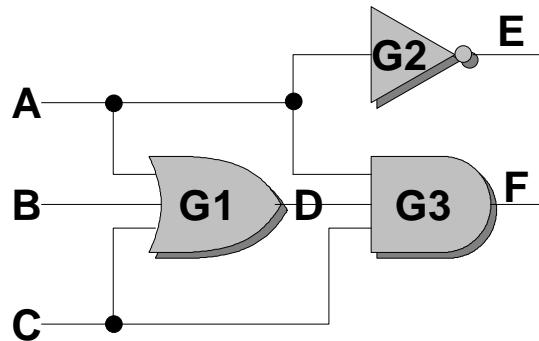
3. Show the simulation of the following circuit using the *Unoptimized* Parallel Technique. Assume that the previous input vector is A=0,B=0,C=1,D=1,E=1,F=0,H=0. The new input vector is A=1,B=0,C=1,D=0,E=1,F=1,H=1. (20 Points.)



Bit:	7	6	5	4	3	2	1	0
A								
B								
C								
D								
E								
F								
H								
J								
K								
L								
M								
N								
P								
Q								



4. Using the *Unoptimized* parallel technique, show the generated code for the following circuit. (20 Points)



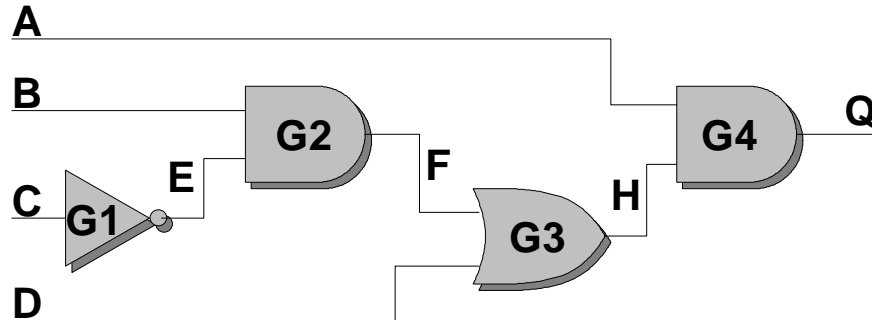
Variable Declarations:

Initialization Code:

Simulation Code:



5. Using the *Optimized Version* of the Parallel Technique, show the simulation of the following circuit. The previous input vector is A=0,B=0,C=1,D=0. The current input vector is A=1,B=1,C=0,D=1. (20 Points.)



	alignment	7	6	5	4	3	2	1	0
A									
B									
C									
D									
E									
F									
H									
Q									

Look at it this way. At least we won't have to take Dr. Maurer's test!

