In a production system we have introduced the following rules:

R$_1$(X,Y): A(X) AND B(Y) AND C(X) THEN D(Y)

R$_2$(X): A(X) AND D(X) THEN E(X)

R$_3$(X,Y): A(X) AND E(Y) THEN G(X)

R$_4$(X,Y): C(X) AND D(Y) THEN F(X)

The database contains the following facts: A(peter), A(albert), B(peter), C(albert)

If the system operates under a **first rule (FIFO)** conflict resolution strategy, considering the order of rules and facts, show the sequence of rules carried out and the data on the Working Memory (WM) for each cycle.

SOLUTION

Cycle	New Facts	Agenda
1	(facts of exam)	1: R1(albert, peter) *
2	D(peter)	2: R2(peter) * 3: R4(albert, peter)
3	E(peter)	3: R4(albert, peter) * 4: R3(peter, peter) 5: R3(albert, peter)
4	F(alberto)	4: R3(peter, peter) * 5: R3(albert, peter)
5	G(peter)	5: R3(albert, peter)*
6	G(albert)	