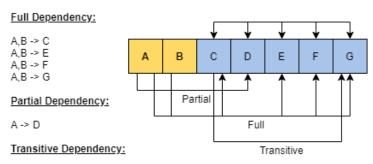
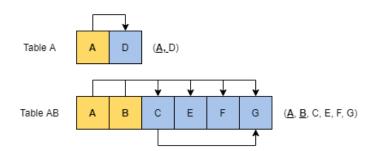
1.

a.

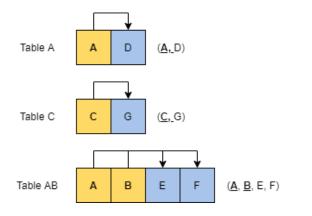


C -> G

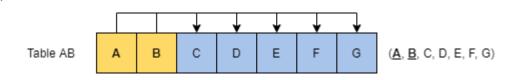
b.



c.



d.



2.

a. BEGIN TRANSACTION;

UPDATE PART SET PART\_ONHAND = PART\_ONHAND - 1 WHERE PART\_NUM = "X";
UPDATE PART SET PART\_ONHAND = PART\_ONHAND - 2 WHERE PART\_NUM = "Y";
UPDATE PART SET PART\_ONHAND = PART\_ONHAND - 2 WHERE PART\_NUM = "Z";
UPDATE PRODUCT SET PROD\_ONHAND = PROD\_ONHAND + 1 WHERE PROD\_NUM = "C3PO";
COMMIT;

b.

| TRL_<br>ID | TRX_N<br>UM | PREV_<br>PTR | NEXT_<br>PTR | OPERAT<br>ION | TABLE             | ROW<br>_ID | ATTRIBUT<br>E   | BEFORE_V<br>ALUE | AFTER_V<br>ALUE |
|------------|-------------|--------------|--------------|---------------|-------------------|------------|-----------------|------------------|-----------------|
| 1          | 1           | NULL         | 2            | START         | BEGIN TRANSACTION |            |                 |                  |                 |
| 2          | 1           | 1            | 3            | UPDATE        | PART              | Х          | PART_ON<br>HAND | 98               | 97              |
| 3          | 1           | 2            | 4            | UPDATE        | PART              | Υ          | PART_ON<br>HAND | 275              | 273             |
| 4          | 1           | 3            | 5            | UPDATE        | PART              | Z          | PART_ON<br>HAND | 153              | 151             |
| 5          | 1           | 4            | 6            | UPDATE        | PROD<br>UCT       | C3P0       | PART_ON<br>HAND | 41               | 42              |
| 6          | 1           | 5            | NULL         | COMMI<br>T    | END TRANSACTION   |            |                 |                  |                 |