HW 3 Nawras Rawas Qalaji

1. (1.) , ,

(2.) , ,

1. (1.) BCD, ACD

(2.) No, attribute C and D are not part of some key

(3.) There are no super keys and the rule is violated

(4.) AB ACE ACD

1. (1.) SELECT \*

FROM R r1, R r2

WHERE NOT EXISTS r1.A=r2.A and r1.B <> r2.B

(2.) CREATE ASSERTION enforceDependency

CHECK SELECT \*

FROM R r1 R r2

WHERE NOT EXISTS r1.A = r2.A and r1.B <> r2.B

(3.) SELECT \*

FROM R r1

WHERE IS NOT NULL (SELECT \*

FROM R r2

WHERE NOT EXISTS r1.A=r2.A and r1.B <> r2.B)

CREATE ASSERTION enforceDependency

CHECK SELECT \*

FROM R r1

WHERE IS NOT NULL (SELECT \*

FROM R r2

WHERE NOT EXISTS r1.A = r2.A and r1.B <> r2.B)

1. (1a.) BD

(1b.) Not good, cannot recover original R

(2a.) AB, CB

(2b.) Good, can recover the original R

(3a.) A, C

(3b.) Not good, cannot recover original R

(4a.) A

(4b.) Not good, cannot recover original