Guião 7
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7.1

a) **1FN**
   R1={A,B,D,F,G,I}
   R2={B,C} -> parcial
   R3={D,F,E} -> transitiva
   R4={G,H} -> transitiva
b) **2FN**
   R1={A,B,D,E,F,G,H,I}
   R2={B,C}
   **3FN**
   R1={A,B,D,F,G,H,I}
   R2={B,C}
   R3={D,F,E}
   R4={G,H}

7.2

R={A,B,C,D,E,F,G,H,I,J} -> está na 1FN
Dependências Funcionais
F={
   {A, B}→{C},
   {A}→{D, E}, -> parcial
   {B}→{F}, -> parcial
   {F}→{G, H}, -> transitiva
   {D}→{I, J} -> transitiva}

a) chave de R: A,B
b) **2FN -> eliminar parciais**
   R1={A,B,C}
   R2={A,D,E,I,J} -> ({D}→{I, J} transitiva)
   R3={B,F,G,H} -> ({F}→{G, H} transitiva)
c) **3FN**
   R1={A,B,C}
   R2={A,D,E}
   R3={B,F}
   R4={D,I,J}
   R5={F,G,H}

7.3

R={A,B,C,D,E} -> está na 3FN
F={
   {A, B}→{C,D,E},
   {D}→{ E},
   {C}→{A}}

a) chave de R: A,B

b) **3FN**
R1={A,B,C,D,E}
R2={D,E}
R1={C,A}

c) **BCNF -> fica sem a relação {A, B}→{C,D,E}**
R1={B,C,D}
R2={D,E}
R1={C,A}

7.4
R={A,B,C,D,E} -> está na 3FN
F={
{A, B}→{C,D,E}, -> a chave A,B tem dependências para todas
{A}→{ C} -> parcial,
{C}→{D} -> transitiva}

a) chaves de R: A,B
b) **2FN**
R1={A,B,C,D,E}
R2={A,C,D}
c) **3FN**
R1={A,B,C,D,E}
R2={A,C}
R3={C,D}
d) **BCNF**
R1={A,B,E}
R2={A,C} → R2+R3 → **R2={A,D}**
R3={C,D} →

7.5

a) i. CREATE VIEW TITLES_AUTHORS AS SELECT dbo.authors.au_lname, dbo.authors.au_fname, dbo.titles.title FROM dbo.authors CROSS JOIN dbo.titles
ii. CREATE VIEW PUBLISHERS_EMPLOYEE AS SELECT dbo.employee.fname, dbo.employee.minit, dbo.employee.lname, dbo.publishers.pub_name FROM dbo.employee INNER JOIN dbo.publishers ON dbo.employee.pub_id = dbo.publishers.pub_id
iii. CREATE VIEW STORES_TITLES AS SELECT dbo.stores.stor_name, dbo.titles.title FROM dbo.sales INNER JOIN dbo.stores ON dbo.sales.stor_id = dbo.stores.stor_id INNER JOIN dbo.titles ON dbo.sales.title_id = dbo.titles.title_id
iv. CREATE VIEW BOOK AS SELECT title, type FROM dbo.titles WHERE (type = 'Business')

b) i. SELECT * FROM TITLES_AUTHORS

ii. SELECT * FROM PUBLISHERS_EMPLOYEE
iii. SELECT * FROM STORES_TITLES
iv. SELECT * FROM BOOK

c) SELECT stor_name, (au_fname + ' ' + au_lname) as author FROM TITLES_AUTHORS JOIN STORES_TITLES ON TITLES_AUTHORS.title=STORES_TITLES.title
d) i. A view da alínea iv só tinha as colunas title e type, por isso não conseguimos executar o comando, alteramos a view para apresentar todas as colunas necessárias.
ii. CREATE VIEW titles_business AS SELECT title_id, title, type, pub_id, price, notes FROM dbo.titles
iii. insert into titles_business (title_id, title, type, pub_id, price, notes) values('BDTst1', 'New BD Book','popular_comp', '1389', $30.00, 'A must-read for DB course.')