

INF3100: Databasesystemer – Oppgavesett 10

Oppgave 19.2.2: For each of the action sequences in Exercise 19.2.1, tell what happens under the wait-die deadlock avoidance system. Assume the order of deadlock-timestamps is the same as the order of subscripts for the transactions, that is, T_1 , T_2 , T_3 , and T_4 . Also assume that transactions that need to restart do so in the order that they were rolled back.

Sekvensene i oppgave 19.2.1:

- a) $r_1(A); r_3(B); r_2(C); w_1(B); w_3(C); w_2(D);$
- d) $r_1(A); r_3(B); w_1(C); r_2(D); r_4(E); w_2(B); w_3(C); w_4(A); w_1(D);$

Oppgave 19.2.3: For each of the action sequences in Exercise 19.2.1, tell what happens under the wound-wait deadlock avoidance system. Make the same assumptions as in Exercise 19.2.2.

Oppgave 16.1.3: Using the simple SQL grammar exhibited in this section, give parse trees for the following queries about relations $R(a, b)$ and $S(b, c)$:

- a) `SELECT a FROM R WHERE b IN
 (SELECT a FROM R, S WHERE R.b = S.b);`

Oppgave 16.3.1: Convert to relational algebra your parse tree from Exercise 16.1.3. Show both the form with a two-argument selection and its eventual conversion to a one-argument (conventional σ_C) selection.

Oppgave 16.x.1: Optimaliser treet i 16.3.1.