

1 Dokumentace temporálních dotazů

Dotaz v TSQL2:

```
SELECT * FROM pokoje
WHERE id NOT IN (SELECT pokoj FROM rezervace)
VALIDTIME ['2013-12-24' - '2013-12-26']
```

Dotaz v SQL:

```
SELECT * FROM pokoje
WHERE id NOT IN (
  SELECT pokoj FROM rezervace WHERE (
    (od BETWEEN '2013-12-24' AND '2013-12-26') OR
    (do BETWEEN '2013-12-24' AND '2013-12-26') OR
    ('2013-12-24' BETWEEN od AND do) OR
    ('2013-12-26' BETWEEN od AND do)
  )
)
```

```

CREATE OR REPLACE PROCEDURE rezervace_smaaz_v_obdobi (
    datum_od DATE, datum_do DATE ) IS
    new_end DATE;
    new_start DATE;
    tmp_zakaznik NUMBER;
    tmp_pokoj NUMBER;
    tmp_od DATE;
    tmp_do DATE;
    tmp_id NUMBER;
    CURSOR cursor1 IS
        SELECT id, zakaznik, pokoj, od, do
        FROM rezervace WHERE od < datum_od AND do > datum_do;
    CURSOR cursor2 IS
        SELECT id, zakaznik, pokoj, od, do
        FROM rezervace WHERE od < datum_do AND do > datum_od;
BEGIN
    IF datum_od <= datum_do THEN
        new_end := datum_od - 1;
        new_start := datum_do + 1;
        DELETE FROM rezervace WHERE od >= datum_od AND do <= datum_do;
        UPDATE rezervace SET do = new_end
            WHERE od < datum_od AND (do BETWEEN datum_od AND datum_do);
        UPDATE rezervace SET od = new_start
            WHERE do > datum_do AND (od BETWEEN datum_od AND datum_do);
        OPEN cursor1;
        LOOP
            FETCH cursor1 INTO tmp_id, tmp_zakaznik, tmp_pokoj, tmp_od, tmp_do;
            EXIT WHEN cursor1%NOTFOUND;
            INSERT INTO rezervace (zakaznik, pokoj, od, do)
                VALUES(tmp_zakaznik, tmp_pokoj, new_start, tmp_do);
            UPDATE rezervace
                SET do = new_end WHERE id = tmp_id;
        END LOOP;
        CLOSE cursor1;
    ELSE
        new_end := datum_do - 1;
        new_start := datum_od + 1;
        DELETE FROM rezervace WHERE od >= datum_do AND do <= datum_od;
        UPDATE rezervace SET do = new_end
            WHERE od < datum_do AND (do BETWEEN datum_do AND datum_od);
        UPDATE rezervace SET od = new_start
            WHERE do > datum_od AND (od BETWEEN datum_do AND datum_od);
        OPEN cursor2;
        LOOP
            FETCH cursor2 INTO tmp_id, tmp_zakaznik, tmp_pokoj, tmp_od, tmp_do;
            EXIT WHEN cursor2%NOTFOUND;
            INSERT INTO rezervace (zakaznik, pokoj, od, do)
                VALUES(tmp_zakaznik, tmp_pokoj, new_start, tmp_do);
            UPDATE rezervace SET do = new_end WHERE id = tmp_id;
        END LOOP;
        CLOSE cursor2;
    END IF;
END;
/

```