Exercise Session 4

1 December

1 Views, Triggers (2 parts, 8p)

Consider an online book shop which sometimes promotes books by displaying them on the front page of their web site. Their web application uses a database created in PostgreSQL using the following statements:

```
CREATE TABLE Books (
    id INTEGER PRIMARY KEY,
    category TEXT,
    price FLOAT,
    promoted BOOLEAN DEFAULT True
);

INSERT INTO Books(id, category, price) VALUES(1, 'Dictionary', 100);
INSERT INTO Books(id, category, price) VALUES(2, 'Dictionary', 150);
INSERT INTO Books(id, category, price) VALUES(3, 'Science', 120);
INSERT INTO Books(id, category, price) VALUES(4, 'Science', 190);
INSERT INTO Books(id, category, price) VALUES(5, 'Science', 320);
```

5a. Create a new VIEW called "PromotionSummary" which outputs 3 columns named "category", "minprice" and "maxprice" containing the category name, minimum price of all promoted books and maximum price of all promoted books. A promoted book has its "promoted" attribute set to True. (4p)

5b. Create a trigger so that, when a tuple from the "PromotionSummary" view is deleted, all Books from the corresponding category have their "promoted" attribute set to False. E.g. if the entry in "PromotionSummary" for category "Novel" is deleted, all entries in "Books" with category "Novel" have their "promoted" attribute set to False. (4p)