**IST370 Practice Worksheet**

**Theme 1: Non-Equality Joins**

**Problem 1: Complete the following 4 queries dealing with the non-equality problem: (They are equivalent to each other and will produce the same result.)**

SELECT title, retail, gift

FROM books b, promotion p

WHERE retail BETWEEN minretail AND maxretail

ORDER BY retail;

SELECT title, retail, gift

FROM books, promotion

WHERE retail >= minretail

AND retail <=maxretail

ORDER BY retail;

SELECT title, retail, gift

FROM books JOIN promotion

ON retail BETWEEN minretail AND maxretail

ORDER BY retail;

SELECT title, retail, gift

FROM books JOIN promotion

ON retail >= minretail

AND retail <=maxretail

ORDER BY retail;

**Problem 2: Does any of the following queries addresses the non-equality problem we dealt with previously?**

SELECT title, retail, gift

FROM books NATURAL JOIN promotion;

SELECT title, retail, gift

FROM books JOIN promotion USING(isbn);

SELECT title, retail, gift

FROM books JOIN promotion USING(gift);

**Theme 2: Self Joins**

**Problem 3: Complete the following 3 queries dealing with the self problem (They are equivalent to each other and will produce the same result.)**

SELECT c.firstname || ' ' || c.lastname "Customer", r.firstname || ' ' || r.lastname "Referred By"

FROM customers c, customers r

WHERE c.referred = r.customer#;

INCORRECT

SELECT c.firstname || ' ' || c.lastname "Customer", r.firstname || ' ' || r.lastname "Referred By"

FROM customers c, customers r

WHERE r.referred = c.customer#;

SELECT r.firstname || ' ' || r.lastname "Old Customer",

c.firstname || ' ' || c.lastname "New Customer"

FROM customers c JOIN customers r

ON c.refferred = r.customer#;