Practical 9 Exercise

***(For questions 1 to 4, use the northwoods database.Run the northwoods script first.)***

1. Retrieve student id, student last name, student first name, faculty id and faculty last name from student and faculty tables (show the Cartesian product).
2. Repeat the above but using the appropriate join condition.
3. Find the faculty last name involved in teaching during the Summer of 2007.
4. Find the call id and grade for student Sarah Miller.
5. Retrieve the inventory id, size, color, quantity on hand, dates shipment lines were received and shipment line quantities for all items in the ClearWater Traders database. (create the tables and insert records with the script given)

**DROP** **TABLE** order\_line CASCADE CONSTRAINTS;  
**DROP** **TABLE** shipment\_line CASCADE CONSTRAINTS;  
**DROP** **TABLE** shipment CASCADE CONSTRAINTS;  
**DROP** **TABLE** inventory CASCADE CONSTRAINTS;  
**DROP** **TABLE** color CASCADE CONSTRAINTS;  
**DROP** **TABLE** item CASCADE CONSTRAINTS;  
**DROP** **TABLE** category CASCADE CONSTRAINTS;  
**DROP** **TABLE** cust\_order CASCADE CONSTRAINTS;  
**DROP** **TABLE** order\_source CASCADE CONSTRAINTS;  
**DROP** **TABLE** customer CASCADE CONSTRAINTS;  
  
**CREATE** **TABLE** customer  
(cust\_id NUMBER(5),   
last VARCHAR2(30),  
first VARCHAR2(30),  
mi CHAR(1),  
address VARCHAR2(30),  
city VARCHAR2(30),  
state CHAR(2),  
zip VARCHAR2(10),  
d\_phone VARCHAR2(10),  
e\_phone VARCHAR2(10),  
**CONSTRAINT** customer\_cust\_id\_pk **PRIMARY** **KEY** (cust\_id));  
  
**CREATE** **TABLE** order\_source  
(order\_source\_id NUMBER(3),  
source\_desc VARCHAR2(30),  
**CONSTRAINT** order\_source\_order\_sourcid\_pk **PRIMARY** **KEY**(order\_source\_id));  
  
**CREATE** **TABLE** cust\_order  
(order\_id NUMBER(8),   
order\_date DATE,  
meth\_pmt VARCHAR2(10),  
cust\_id NUMBER(5),  
order\_source\_id NUMBER(3),  
**CONSTRAINT** cust\_order\_order\_id\_pk **PRIMARY** **KEY** (order\_id),  
**CONSTRAINT** cust\_order\_cust\_id\_fk **FOREIGN** **KEY** (cust\_id) **REFERENCES** customer(cust\_id),  
**CONSTRAINT** cust\_order\_order\_source\_id\_fk **FOREIGN** **KEY** (order\_source\_id)   
**REFERENCES** order\_source(order\_source\_id));  
  
**CREATE** **TABLE** category  
(category\_id NUMBER(2),  
category\_desc VARCHAR2(20),  
**CONSTRAINT** category\_category\_id\_pk **PRIMARY** **KEY** (category\_id));  
  
**CREATE** **TABLE** item  
(item\_id NUMBER(8),  
item\_desc VARCHAR2(100) **NOT** **NULL**,  
category\_id NUMBER(2),  
item\_image BLOB,  
**CONSTRAINT** item\_item\_id\_pk **PRIMARY** **KEY** (item\_id),  
**CONSTRAINT** item\_category\_id\_fk **FOREIGN** **KEY** (category\_id) **REFERENCES** category(category\_id));  
  
**CREATE** **TABLE** color  
(color VARCHAR2(20),  
**CONSTRAINT** color\_color\_pk **PRIMARY** **KEY** (color));  
  
**CREATE** **TABLE** inventory  
(inv\_id NUMBER(10),  
item\_id NUMBER(8),  
item\_size VARCHAR2(10),  
color VARCHAR2(20),  
price NUMBER(6,2),  
qoh NUMBER(4),  
**CONSTRAINT** inventory\_inv\_id\_pk **PRIMARY** **KEY** (inv\_id),  
**CONSTRAINT** inventory\_itemid\_fk **FOREIGN** **KEY** (item\_id) **REFERENCES** item(item\_id),  
**CONSTRAINT** inventory\_color\_fk **FOREIGN** **KEY** (color) **REFERENCES** color(color));  
  
**CREATE** **TABLE** shipment  
(shipment\_id NUMBER(10),  
date\_expected DATE,  
**CONSTRAINT** shipment\_shipment\_id\_pk **PRIMARY** **KEY** (shipment\_id));  
  
**CREATE** **TABLE** shipment\_line  
(shipment\_id NUMBER(10),   
inv\_id NUMBER(10),  
ship\_quantity NUMBER(4),  
date\_received DATE,   
**CONSTRAINT** shipment\_line\_ship\_id\_fk **FOREIGN** **KEY** (shipment\_id) **REFERENCES** shipment(shipment\_id),  
**CONSTRAINT** shipment\_line\_inv\_id\_fk **FOREIGN** **KEY** (inv\_id) **REFERENCES** inventory(inv\_id),  
**CONSTRAINT** ship\_line\_shipid\_invid\_pk **PRIMARY** **KEY**(shipment\_id, inv\_id));  
  
**CREATE** **TABLE** order\_line   
(order\_id NUMBER(8),   
inv\_id NUMBER(10),   
order\_quantity NUMBER(4) **NOT** **NULL**,   
**CONSTRAINT** order\_line\_order\_id\_fk **FOREIGN** **KEY** (order\_id) **REFERENCES** cust\_order(order\_id),  
**CONSTRAINT** order\_line\_inv\_id\_fk **FOREIGN** **KEY** (inv\_id) **REFERENCES** inventory(inv\_id),  
**CONSTRAINT** order\_line\_orderid\_invid\_pk **PRIMARY** **KEY** (order\_id, inv\_id));  
  
  
*--- inserting records into CUSTOMER*  
**INSERT** **INTO** CUSTOMER **VALUES**  
(107, 'Harris', 'Paula', 'E', '1156 Water Street, Apt. #3', 'Osseo', 'WI',   
'54705', '7155558943', '7155559035');  
  
**INSERT** **INTO** CUSTOMER **VALUES**  
(232, 'Edwards', 'Mitch', 'M', '4204 Garner Street', 'Washburn', 'WI',   
'54891', '7155558243', '7155556975');  
  
**INSERT** **INTO** CUSTOMER **VALUES**  
(133, 'Garcia', 'Maria', 'H', '2211 Pine Drive', 'Radisson', 'WI',   
'54867', '7155558332', '7155558332');  
  
**INSERT** **INTO** CUSTOMER **VALUES**  
(154, 'Miller', 'Lee', **NULL**, '699 Pluto St. NW', 'Silver Lake', 'WI',   
'53821', '7155554978', '7155559002');  
  
**INSERT** **INTO** CUSTOMER **VALUES**  
(179, 'Chang', 'Alissa', 'R', '987 Durham Rd.', 'Sister Bay', 'WI',   
'54234', '7155557651', '7155550087');  
  
*--- inserting records into ORDER\_SOURCE*  
**INSERT** **INTO** order\_source **VALUES** (1, 'Winter 2002');  
**INSERT** **INTO** order\_source **VALUES** (2, 'Spring 2003');  
**INSERT** **INTO** order\_source **VALUES** (3, 'Summer 2003');  
**INSERT** **INTO** order\_source **VALUES** (4, 'Outdoor 2003');  
**INSERT** **INTO** order\_source **VALUES** (5, 'Children''s 2003');  
**INSERT** **INTO** order\_source **VALUES** (6, 'Web Site');  
  
*--- inserting records into CUST\_ORDER*  
**INSERT** **INTO** cust\_order **VALUES**  
(1057, TO\_DATE('05/29/2003', 'MM/DD/YYYY'), 'CC', 107, 2);  
  
**INSERT** **INTO** cust\_order **VALUES**  
(1058, TO\_DATE('05/29/2003', 'MM/DD/YYYY'), 'CC', 232, 6);  
  
**INSERT** **INTO** cust\_order **VALUES**  
(1059, TO\_DATE('05/31/2003', 'MM/DD/YYYY'), 'CHECK', 133, 2);  
  
**INSERT** **INTO** cust\_order **VALUES**  
(1060, TO\_DATE('05/31/2003', 'MM/DD/YYYY'), 'CC', 154, 3);  
  
**INSERT** **INTO** cust\_order **VALUES**  
(1061, TO\_DATE('06/01/2003', 'MM/DD/YYYY'), 'CC', 179, 6);  
  
**INSERT** **INTO** cust\_order **VALUES**  
(1062, TO\_DATE('06/01/2003', 'MM/DD/YYYY'), 'CC', 179, 3);  
  
*--- inserting records into CATEGORY*  
**INSERT** **INTO** category **VALUES** (1, 'Women''s Clothing');  
**INSERT** **INTO** category **VALUES** (2, 'Children''s Clothing');  
**INSERT** **INTO** category **VALUES** (3, 'Men''s Clothing');  
**INSERT** **INTO** category **VALUES** (4, 'Outdoor Gear');  
  
*--- inserting records into ITEM*  
**INSERT** **INTO** item **VALUES**  
(894, 'Women''s Hiking Shorts', 1, EMPTY\_BLOB());  
  
**INSERT** **INTO** item **VALUES**  
(897, 'Women''s Fleece Pullover', 1, EMPTY\_BLOB());  
  
**INSERT** **INTO** item **VALUES**  
(995, 'Children''s Beachcomber Sandals', 2, EMPTY\_BLOB());  
  
**INSERT** **INTO** item **VALUES**  
(559, 'Men''s Expedition Parka', 3, EMPTY\_BLOB());  
  
**INSERT** **INTO** item **VALUES**  
(786, '3-Season Tent', 4, EMPTY\_BLOB());  
  
  
*--- inserting records into COLOR*  
**INSERT** **INTO** color **VALUES** ('Sky Blue');  
**INSERT** **INTO** color **VALUES** ('Light Grey');  
**INSERT** **INTO** color **VALUES** ('Khaki');  
**INSERT** **INTO** color **VALUES** ('Navy');  
**INSERT** **INTO** color **VALUES** ('Royal');  
**INSERT** **INTO** color **VALUES** ('Eggplant');  
**INSERT** **INTO** color **VALUES** ('Blue');  
**INSERT** **INTO** color **VALUES** ('Red');  
**INSERT** **INTO** color **VALUES** ('Spruce');  
**INSERT** **INTO** color **VALUES** ('Turquoise');  
**INSERT** **INTO** color **VALUES** ('Bright Pink');  
  
*--- inserting records into INVENTORY*  
**INSERT** **INTO** inventory **VALUES**  
(11668, 786, **NULL**, 'Sky Blue', 259.99, 16);  
  
**INSERT** **INTO** inventory **VALUES**  
(11669, 786, **NULL**, 'Light Grey', 259.99, 12);  
  
**INSERT** **INTO** inventory **VALUES**  
(11775, 894, 'S', 'Khaki', 29.95, 150);  
  
**INSERT** **INTO** inventory **VALUES**  
(11776, 894, 'M', 'Khaki', 29.95, 147);  
  
**INSERT** **INTO** inventory **VALUES**  
(11777, 894, 'L', 'Khaki', 29.95, 0);  
  
**INSERT** **INTO** inventory **VALUES**  
(11778, 894, 'S', 'Navy', 29.95, 139);  
  
**INSERT** **INTO** inventory **VALUES**  
(11779, 894, 'M', 'Navy', 29.95, 137);  
  
**INSERT** **INTO** inventory **VALUES**  
(11780, 894, 'L', 'Navy', 29.95, 115);  
  
**INSERT** **INTO** inventory **VALUES**  
(11795, 897, 'S', 'Eggplant', 59.95, 135);  
  
**INSERT** **INTO** inventory **VALUES**  
(11796, 897, 'M', 'Eggplant', 59.95, 168);  
  
**INSERT** **INTO** inventory **VALUES**  
(11797, 897, 'L', 'Eggplant', 59.95, 187);  
  
**INSERT** **INTO** inventory **VALUES**  
(11798, 897, 'S', 'Royal', 59.95, 0);  
  
**INSERT** **INTO** inventory **VALUES**  
(11799, 897, 'M', 'Royal', 59.95, 124);  
  
**INSERT** **INTO** inventory **VALUES**  
(11800, 897, 'L', 'Royal', 59.95, 112);  
  
**INSERT** **INTO** inventory **VALUES**  
(11820, 995, '10', 'Turquoise', 15.99, 121);  
  
**INSERT** **INTO** inventory **VALUES**  
(11821, 995, '11', 'Turquoise', 15.99, 111);  
  
**INSERT** **INTO** inventory **VALUES**  
(11822, 995, '12', 'Turquoise', 15.99, 113);  
  
**INSERT** **INTO** inventory **VALUES**  
(11823, 995, '1', 'Turquoise', 15.99, 121);  
  
**INSERT** **INTO** inventory **VALUES**  
(11824, 995, '10', 'Bright Pink', 15.99, 148);  
  
**INSERT** **INTO** inventory **VALUES**  
(11825, 995, '11', 'Bright Pink', 15.99, 137);  
  
**INSERT** **INTO** inventory **VALUES**  
(11826, 995, '12', 'Bright Pink', 15.99, 134);  
  
**INSERT** **INTO** inventory **VALUES**  
(11827, 995, '1', 'Bright Pink', 15.99, 123);  
  
**INSERT** **INTO** inventory **VALUES**  
(11845, 559, 'S', 'Spruce', 199.95, 114);  
  
**INSERT** **INTO** inventory **VALUES**  
(11846, 559, 'M', 'Spruce', 199.95, 17);  
  
**INSERT** **INTO** inventory **VALUES**  
(11847, 559, 'L', 'Spruce', 209.95, 0);  
  
**INSERT** **INTO** inventory **VALUES**  
(11848, 559, 'XL', 'Spruce', 209.95, 12);  
  
*--inserting records into SHIPMENT*  
  
**INSERT** **INTO** shipment **VALUES**  
(211, TO\_DATE('09/15/2003', 'MM/DD/YYYY'));  
  
**INSERT** **INTO** shipment **VALUES**  
(212, TO\_DATE('11/15/2003', 'MM/DD/YYYY'));  
  
**INSERT** **INTO** shipment **VALUES**  
(213, TO\_DATE('06/25/2003', 'MM/DD/YYYY'));  
  
**INSERT** **INTO** shipment **VALUES**  
(214, TO\_DATE('06/25/2003', 'MM/DD/YYYY'));  
  
**INSERT** **INTO** shipment **VALUES**  
(215, TO\_DATE('08/15/2003', 'MM/DD/YYYY'));  
  
*--inserting records into SHIPMENT\_LINE*  
**INSERT** **INTO** shipment\_line **VALUES**  
(211, 11668, 25, TO\_DATE('09/10/2003', 'MM/DD/YYYY'));  
  
**INSERT** **INTO** shipment\_line **VALUES**  
(211, 11669, 25, TO\_DATE('09/10/2003', 'MM/DD/YYYY'));  
  
**INSERT** **INTO** shipment\_line **VALUES**  
(212, 11669, 25, **NULL**);  
  
**INSERT** **INTO** shipment\_line **VALUES**  
(213, 11777, 200, **NULL**);  
  
**INSERT** **INTO** shipment\_line **VALUES**  
(213, 11778, 200, **NULL**);  
  
**INSERT** **INTO** shipment\_line **VALUES**  
(213, 11779, 200, **NULL**);  
  
**INSERT** **INTO** shipment\_line **VALUES**  
(214, 11798, 100, TO\_DATE('08/15/2003', 'MM/DD/YYYY'));  
  
**INSERT** **INTO** shipment\_line **VALUES**  
(214, 11799, 100, TO\_DATE('08/25/2003', 'MM/DD/YYYY'));  
  
**INSERT** **INTO** shipment\_line **VALUES**  
(215, 11845, 50, TO\_DATE('08/15/2003', 'MM/DD/YYYY'));  
  
**INSERT** **INTO** shipment\_line **VALUES**  
(215, 11846, 100, TO\_DATE('08/15/2003', 'MM/DD/YYYY'));  
  
**INSERT** **INTO** shipment\_line **VALUES**  
(215, 11847, 100, TO\_DATE('08/15/2003', 'MM/DD/YYYY'));  
  
*--- inserting records into ORDER\_LINE*  
**INSERT** **INTO** order\_line **VALUES** (1057, 11668, 1);  
**INSERT** **INTO** order\_line **VALUES** (1057, 11800, 2);  
**INSERT** **INTO** order\_line **VALUES** (1058, 11824, 1);  
**INSERT** **INTO** order\_line **VALUES** (1059, 11846, 1);  
**INSERT** **INTO** order\_line **VALUES** (1059, 11848, 1);  
**INSERT** **INTO** order\_line **VALUES** (1060, 11798, 2);  
**INSERT** **INTO** order\_line **VALUES** (1061, 11779, 1);  
**INSERT** **INTO** order\_line **VALUES** (1061, 11780, 1);  
**INSERT** **INTO** order\_line **VALUES** (1062, 11799, 1);  
**INSERT** **INTO** order\_line **VALUES** (1062, 11669, 3);  
  
**COMMIT**;