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| 1.Structure of the ABC\_PUBLISHERS table:  CREATE TABLE ABC\_PUBLISHERS (  PUBID NUMBER(2) NOT NULL,  NAME VARCHAR2(23) NOT NULL,  CONTACT VARCHAR2(15),  PHONE VARCHAR2(12),  CONSTRAINT PK\_ABC\_PUBLISHERS PRIMARY KEY (PUBID)  ); | 2. INSERT INTO ABC\_PUBLISHERS (PUBID, NAME, CONTACT, PHONE) VALUES  (1, 'PRINTING IS US', 'TOMMIE SEYMOUR', '000-714-8321'),  (2, 'PUBLISH OUR WAY', 'JANE TOMLIN', '010-410-0010'),  (3, 'AMERICAN PUBLISHING', 'DAVID DAVIDSON', '800-555-1211'),  (4, 'READING MATERIALS INC', 'RENEE SMITH', '800-555-9743'),  (5, 'REED-N-RITE', 'SEBASTIAN JONES', '800-555-8284'); |
| 3 CREATE TABLE ABC\_BOOKS (  ISBN VARCHAR2(10) NOT NULL,  TITLE VARCHAR2(10),  PUBDATE DATE,  PUBID NUMBER (2),  COST NUMBER (5,2),  RETAIL NUMBER (5,2),  CATEGORY VARCHAR2(12),  CONSTRAINT pk\_isbn PRIMARY KEY (ISBN)  ); | 4. -- Insert data into the ABC\_BOOKS table  INSERT INTO ABC\_BOOKS (ISBN, TITLE, PUBDATE, PUBID, COST, RETAIL, CATEGORY) VALUES  ('3437212490', 'COOKING WITH MUSHROOMS', TO\_DATE('28-FEB-66', 'DD-MON-RR'), 4, 12.5, 19.95, 'COOKING'),  ('1859831198', 'BODYBUILD IN 10 MINUTES A DAY', TO\_DATE('21-JAN-01', 'DD-MON-RR'), 4, 18.75, 30.95, 'FITNESS'),  ('0401140733', 'REVENGE OF MICKEY', TO\_DATE('14-DEC-01', 'DD-MON-RR'), 1, 14.2, 22, 'FAMILY LIFE'),  ('4981341710', 'BUILDING A CAR WITH TOOTHPICKS', TO\_DATE('01-MAR-05', 'DD-MON-RR'), 2, 37.8, 59.95, 'CHILDREN'),  ('8843172113', 'DATABASE IMPLEMENTATION', TO\_DATE('04-JUN-05', 'DD-MON-RR'), 3, 31.4, 55.95, 'COMPUTER'); |
| 5 CREATE TABLE ABC\_CUSTOMERS (  CUSTOMER\_NUM NUMBER(4) NOT NULL,  LASTNAME VARCHAR2(10),  FIRSTNAME VARCHAR2(10),  ADDRESS VARCHAR2(20),  CITY VARCHAR2(12),  STATE VARCHAR2(2),  ZIP VARCHAR2(5),  REFERRED NUMBER(4),  CONSTRAINT pk\_customer\_num PRIMARY KEY (CUSTOMER\_NUM)  ); | 6. INSERT INTO ABC\_CUSTOMERS (CUSTOMER\_NUM, LASTNAME, FIRSTNAME, ADDRESS, CITY, STATE, ZIP, REFERRED) VALUES  (1001, 'MORALES', 'BONITA', 'P.O. BOX 651', 'EASTPOINT', 'FL', '32328', 1002),  (1002, 'THOMPSON', 'RYAN', 'P.O. BOX 9835', 'SANTA MONICA', 'CA', '90404', 1001),  (1003, 'SMITH', 'LEILA', 'P.O. BOX 66', 'TALLAHASSEE', 'FL', '32306', 1803),  (1004, 'PIERSON', 'THOMAS', '69821 SOUTH AVENUE', 'BOISE', 'ID', '83707', NULL),  (1005, 'GIRARD', 'CINDY', 'P.O. BOX 851', 'SEATTLE', 'WA', '98115', NULL),  (1006, 'CRUZ', 'MESHIA', '82 DIRT ROAD', 'ALBANY', 'NY', '12211', NULL),  (1007, 'GIANA', 'TAMMY', '9153 MAIN STREET', 'AUSTIN', 'TX', '78710', NULL);  SELECT \* FROM ABC\_CUSTOMERS; |
| CREATE TABLE ABC\_ORDERS (  ORDER\_NUM NUMBER(4) NOT NULL,  CUSTOMER\_NUM NUMBER(4),  ORDERDATE DATE,  SHIPDATE DATE,  SHIPSTREET VARCHAR2(18),  SHIPCITY VARCHAR2(15),  SHIPSTATE VARCHAR2(2),  SHIPZIP VARCHAR2(5),  PRIMARY KEY (ORDER\_NUM)  ); | CREATE TABLE ABC\_BOOK\_ORDER (  ORDER\_NUM NUMBER(4) NOT NULL,  ISBN VARCHAR2(10) NOT NULL,  PRIMARY KEY (ORDER\_NUM, ISBN), -- Setting a composite primary key  FOREIGN KEY (ORDER\_NUM) REFERENCES ABC\_ORDERS(ORDER\_NUM), -- Assuming a foreign key relationship with ABC\_ORDERS  FOREIGN KEY (ISBN) REFERENCES ABC\_BOOKS(ISBN) -- Assuming a foreign key relationship with ABC\_BOOKS  );  SELECT \* FROM ABC\_BOOK\_ORDER; |
| 1. Add a new row in the ORDERS table with the following data: Order# = 1021, Customer# = 1009, and Order date = July 20, 2009.  Insert into (Ord\_id, cus\_id , order\_date)  Value (1021,1009, To\_Date( ‘2009-08-07’ ‘ ‘ yyyy-mm-dd));  Select\* from orders  Where order\_id = 1021; | 2. Modify the zip code on order 1017 to 33222.  Update orders  Set zip\_code = 33222  Where order\_id 1017;  Commit; ----save permanent |
| 3. Execute the script and set the following values: isbn = 1059831198 and cost = $20.00.  Update order  Set cost =20.00  Where isbn = ‘00000000001’  Select \* from orders  Where isbn = ‘0000000000001’; | 4. Delete Order# 1005. You need to address both the master order record and the related  detailed records.  Delete from orders  Where order\_id = 1005; |
| 5. Which customers live in New Jersey? List each customer’s last name, first name, and state  Select\* from customers  From State = “NJ”; | 6. Which orders shipped after April 1, 2009? List each order number and the date it shipped  Select order\_num , ship\_ date  From orders  Where shipped\_date > To\_date (‘2009-04-01’, ‘ yyyy-mm-dd’); |
| 7. Which books aren’t in the Fitness category? List each book title and category.  Select title, category  From books where category != ‘fitness’;  6. List all authors whose last name contains the letter pattern “IN.” Put the results in order of last name, then first name. List each author’s last name and first name.  select last\_name, first\_name  from authors  where last\_name Like ‘%IN%’  order by last\_name, first\_name; | 8. Display the number of books with a retail price of more than $30.00.  SELECT COUNT(\*) AS number\_of\_books  FROM books  WHERE retail\_price > 30.00;  9. Display the most recent publication date of all books sold  SELECT MAX(b.publication\_date) AS most\_recent\_publication  FROM books b  JOIN sales s ON b.book\_id = s.book\_id; |
| 9. Determine the total profit generated by sales to customer 1017. Note: Quantity should be reflected in the total profit calculation.  SELECT SUM((b.retail\_price - b.cost\_price) \* s.quantity) AS total\_profit  FROM sales s  JOIN books b ON s.book\_id = b.book\_id  WHERE s.customer\_id = 1017; | 10. List the retail price of the least expensive book in the computer category.  SELECT MIN(retail\_price) AS least\_expensive\_price  FROM books  WHERE category = 'Computer'; |
| 11. Determine the average profit generated by orders in the ORDERS table. Note: The totalnprofit by order must be calculated before finding the average profit.  SELECT AVG((b.retail\_price - b.cost\_price) \* o.quantity) AS average\_profit  FROM orders o  JOIN books b ON o.book\_id = b.book\_id; | 12. What’s the retail price of the most expensive book written by Lisa White?  SELECT MAX(b.retail\_price) AS most\_expensive\_price  FROM books b  JOIN book\_authors ba ON b.book\_id = ba.book\_id  JOIN authors a ON ba.author\_id = a.author\_id  WHERE a.name = 'Lisa White'; |
| 13. Create a list that displays the title of each book and the name and phone number of the contact at the publisher’s office for reordering each book.  SELECT b.title, p.name AS publisher\_name, p.contact\_phone  FROM books b  JOIN publishers p ON b.publisher\_id = p.publisher\_id; | 14. Produce a list of all customers who live in the state of Florida and have ordered books  about computers.  SELECT DISTINCT c.customer\_id, c.name  FROM customers c  JOIN orders o ON c.customer\_id = o.customer\_id  JOIN order\_details od ON o.order\_id = od.order\_id  JOIN books b ON od.book\_id = b.book\_id  WHERE c.state = 'Florida' AND b.category = 'Computer'; |
| 15.Display a list of all books on the BOOKS table. If a book has been ordered by a customer, also list the corresponding order number and the state in which the customer resides.  SELECT  b.book\_id,  b.title,  b.author,  o.order\_id,  c.state  FROM  books b  LEFT JOIN  order\_details od ON b.book\_id = od.book\_id  LEFT JOIN  orders o ON od.order\_id = o.order\_id  LEFT JOIN  customers c ON o.customer\_id = c.customer\_id; | 16. Which books were written by an author with the last name Adams? Perform the search  using the author name.  SELECT b.book\_id, b.title  FROM books b  JOIN authors a ON b.author\_id = a.author\_id  WHERE a.full\_name LIKE '%Adams%';  17.a search condition, include the IN operator  Select title, retail  From books  Where state IN (‘VA’, ‘MD’);  18. Write an SQL query to retrieve records from one of the tables in the JustLee Books database. In a search condition, include multiple conditions using logical operators (AND and OR).  Select \* from book  Where retail >50  And (state = ‘VA’ OR State = ‘MD’); |
| 2.Write an SQL query to retrieve records from one of the tables in the JustLee Books database. In a search condition, include the BETWEEN … AND operator.  SELECT title, retail  FROM book  WHERE retail between 35 and 75; | 20. Calculate the average value, the maximum value, and the minimum value for one of the columns in the JustLee Books Database using the AVG, MAX and MIN group functions.  SELECT AVG(retail) AS avg\_retail\_price,  MAX(retail) AS max\_retail\_price,  MIN(retail) AS min\_retail\_price  FROM BOOKS; |
| 21. Use the COUNT function to count non-NULL values first and then to count the total number of records in one of the tables in JustLee Books Database.  SELECT COUNT(shipdate) AS non\_null\_shipdates,  COUNT(\*) AS total\_orders  FROM ORDERS; | 23. Write an SQL query that uses the GROUP BY, WHERE and HAVING statements. Explain what the query is supposed to do.  SELECT category,  COUNT(\*) AS total\_books  FROM BOOKS  WHERE retail > 10  GROUP BY category  HAVING COUNT(\*) > 3; |