

## ITC 5104 Database Design and SQL

Name: Ankur Prajapati

StudentID: N01324892

Section:0NA

1. Determine how many books are in the Cooking category.

```
SELECT COUNT (*) FROM BOOKS WHERE CATEGORY = 'COOKING';
```

657			
658	/* Name - Ankur Prajapati	Assignment - 10(1)	StudentID: N01324892*/
659	SELECT COUNT(*) FROM BOOKS WHERE CATEGORY = 'COOKING';		
Query Result x			
All Rows Fetched: 1 in 0.031 seconds			
	COUNT(*)		
1	2		

2. Display the number of books with a retail price of more than \$30.00.

```
SELECT COUNT (*) FROM BOOKS WHERE RETAIL > 30;
```

662			
663	/* Name - Ankur Prajapati	Assignment - 10(2)	StudentID: N01324892*/
664	SELECT COUNT(*) FROM BOOKS WHERE RETAIL > 30;		
Query Result x			
All Rows Fetched: 1 in 2.707 seconds			
	COUNT(*)		
1	8		

3. Display the date of the most recently published book.

```
SELECT MAX (PUBDATE) FROM BOOKS;
```

666	/* Name - Ankur Prajapati	Assignment - 10(3)	StudentID: N01324892*/
667	SELECT MAX(PUBDATE) FROM BOOKS;		
668			
669	/* Name - Ankur Prajapati	Assignment - 10(4)	StudentID: N01324892*/
Query Result x			
All Rows Fetched: 1 in 0.006 seconds			
	MAX(PUBDATE)		
1	11-11-06		

4. Determine the total profit generated by sales to customer 1017. Note: Quantity should be reflected in the total profit calculation.

```
SELECT SUM ((retail-cost) *quantity) AS "Total Profit"
FROM orders JOIN orderitems USING (order#) JOIN BOOKS USING (isbn)
WHERE customer#=1017;
```

```
669 /* Name - Ankur Prajapati           Assignment - 10(4)           StudentID: N01324892*/
670 SELECT SUM ((retail-cost)*quantity) AS "Total Profit"
671 FROM orders JOIN orderitems USING(order#) JOIN BOOKS USING(isbn)
672 WHERE customer#=1017;
```

Query Result x	
All Rows Fetched: 1 in 8.969 seconds	
Total Profit	
1	59.78

5. List the retail price of the least expensive book in the Computer category.

```
SELECT MIN (RETAIL) AS "Price of Least Expensive Book"
FROM BOOKS
WHERE CATEGORY = 'COMPUTER';
```

```
674 /* Name - Ankur Prajapati           Assignment - 10(5)           StudentID: N01324892*/
675 SELECT MIN (RETAIL) AS "Price of Least Expensive Book" FROM BOOKS WHERE CATEGORY = 'COMPUTER';
676
```

Query Result x	
All Rows Fetched: 1 in 0.007 seconds	
Price of Least Expensive Book	
1	25

6. Determine the average profit generated by orders in the ORDERS table. Note: The total profit by order must be calculated before finding the average profit.

```
SELECT AVG(SUM((retail-cost) * quantity)) AS "AVG PROFIT"
FROM orders JOIN orderitems USING (order#) JOIN BOOKS USING (isbn)
GROUP BY order#;
```

```
677 /* Name - Ankur Prajapati           Assignment - 10(6)           StudentID: N01324892*/
678 SELECT AVG(SUM((retail-cost)*quantity)) AS "AVG PROFIT"
679 FROM orders JOIN orderitems USING(order#) JOIN BOOKS USING(isbn)
680 GROUP BY order#;
```

Query Result x	
All Rows Fetched: 1 in 0.032 seconds	
AVG PROFIT	
1	33.77238095238095238095238095238095238095

7. Determine how many orders have been placed by each customer in the CUSTOMERS table. Do not include in the results any customer who has not recently placed an order with Just Lee Books. In other words, display only the customers who have made purchases.

```
SELECT CUSTOMER#, COUNT (*) AS "Order Placed"
FROM ORDERS
GROUP BY CUSTOMER#;
```

681  
682 /\* Name - Ankur Prajapati Assignment - 10(7) StudentID: N01324892\*/  
683 SELECT CUSTOMER#, COUNT(\*) AS "Order Placed"  
684 FROM ORDERS  
685 GROUP BY CUSTOMER#;

Query Result x

SQL | All Rows Fetched: 14 in 0.257 seconds

	CUSTOMER#	Order Placed
1	1011	1
2	1003	2
3	1017	1
4	1001	2
5	1007	2
6	1010	2
7	1004	1
8	1015	1
9	1005	2
10	1014	1
11	1008	1
12	1020	2
13	1018	2

8. Determine the average retail price of books by publisher name and category. Include only the categories Children and Computer and the groups with an average retail price greater than \$50.

```
SELECT NAME, CATEGORY, AVG (retail)
FROM BOOKS JOIN publisher USING (pubid)
WHERE CATEGORY IN('COMPUTER','CHILDREN')
GROUP BY NAME, CATEGORY;
```

```

684
685
686
687
688
689
690
691

```

```

/* Name - Ankur Prajapati      Assignment - 10(8)      StudentID: N01324892*/
SELECT NAME, CATEGORY, AVG (retail)
FROM BOOKS JOIN publisher USING (pubid)
WHERE CATEGORY IN ('COMPUTER','CHILDREN')
GROUP BY NAME, CATEGORY;

```

Query Result x

SQL | All Rows Fetched: 4 in 0.363 seconds

	NAME	CATEGORY	AVG(RETAIL)
1	PUBLISH OUR WAY	CHILDREN	59.95
2	PUBLISH OUR WAY	COMPUTER	54.5
3	AMERICAN PUBLISHING	COMPUTER	52.3
4	REED-N-RITE	CHILDREN	8.95

9. List the customers living in Georgia or Florida who have recently placed an order totalling more than \$80.

```

SELECT DISTINCT firstname, lastname
FROM CUSTOMERS JOIN ORDERS USING(CUSTOMER#) JOIN ORDERITEMS
USING(ORDER#) JOIN BOOKS USING(isbn)
WHERE (STATE = 'FL' or STATE = 'GA')
GROUP BY ORDER#, firstname, lastname
HAVING SUM(retail*quantity) > 80;

```

```

693
694
695
696
697
698
699

```

```

/* Name - Ankur Prajapati      Assignment - 10(9)      StudentID: N01324892*/
SELECT DISTINCT firstname, lastname
FROM CUSTOMERS JOIN ORDERS USING(CUSTOMER#) JOIN ORDERITEMS USING(ORDER#) JOIN BOOKS USING(isbn)
WHERE (STATE = 'FL' or STATE = 'GA')
GROUP BY ORDER#, firstname, lastname
HAVING SUM(retail*quantity) > 80;

```

Query Result x

SQL | All Rows Fetched: 3 in 0.916 seconds

	FIRSTNAME	LASTNAME
1	BONITA	MORALES
2	LEILA	SMITH
3	JAKE	LUCAS

10. What's the retail price of the most expensive book written by Lisa White?


```

SELECT MAX (retail) AS "Price of Expensive BOOK"
FROM BOOKS JOIN BOOKAUTHOR USING(ISBN) JOIN AUTHOR USING(AUTHORID)
WHERE FNAME = 'LISA' AND LNAME = 'WHITE';

```

```
701
702 /* Name - Ankur Prajapati           Assignment - 10(10)           StudentID: N01324892*/
703 SELECT MAX(retail) AS "Price of Expensive BOOK"
704 FROM BOOKS JOIN BOOKAUTHOR USING(ISBN) JOIN AUTHOR USING(AUTHORID)
705 WHERE FNAME = 'LISA' AND LNAME = 'WHITE';
```

Query Result x

 SQL | All Rows Fetched: 1 in 4.433 seconds

Price of Expensive BOOK BY LISA WHITE	
1	39.95