Q.2. Create the table Sales and insert records as given.

Write analytical queries -

- 1. To find total profit for each country.
- 2. Display Country with maximum profit.
- 3. Display products with maximum and minimum profit in each country.
- 4. Display average sale of each product in each country.
- 5. Find total profit product wise.

1	year	1	country	1	product	1	profit	1
+		+		+		*		+
3	2000	1	Finland	1	Computer	1	1500	1
1	2000	1	Finland	1	Phone	1	100	1
1	2001	1	Finland	1	Phone	1	10	1
1	2000	1	India	1	Calculator	1	75	1
1	2000	1	India	1	Calculator	1	75	1
1	2000	1	India	1	Computer	1	1200	1
1	2000	1	USA	1	Calculator	1	75	1
1	2000	1	USA	1	Computer	1	1500	1
1	2001	1	USA	1	Calculator	1	50	1
1	2001	1	USA	1	Computer	1	1500	1
1	2001	1	USA	1	Computer	1	1200	1
1	2001	1	USA	1	TV	1	150	1
1	2001	1	USA	1	TV	1	100	1
+		+		+		+		+

SQL Query:

Create table Sales (year int, country varchar(20), product varchar(20), profit int);

Table created.

1. To find total profit for each country. SQL Query:

SELECT country, SUM(profit) AS total_profit FROM Sales GROUP BY country ORDER BY total_profit DESC;

COUNTRY	TOTAL_PROFIT
USA	4575
Finland	1610
India	1350

2. Display Country with maximum profit. SQL Query:

SELECT country, MAX(profit) AS max_profit FROM Sales GROUP BY country ORDER BY max_profit DESC LIMIT 1;

COUNTRY	MAX_PROFIT	
Finland	1500	
USA	1500	
India	1200	

3. Display products with maximum and minimum profit in each country. $\ensuremath{\mathsf{SQL}}$ Query:

SELECT country, product, MAX(profit) AS max_profit, MIN(profit) AS min_profit FROM Sales GROUP BY country, product ORDER BY country, product;

COUNTRY	PRODUCT	MAX_PROFIT	MIN_PROFIT
Finland	Computer	1500	1500
Finland	Phone	100	10
India	Calculator	75	75
India	Computer	1200	1200
USA	Calculator	75	50
USA	Computer	1500	1200
USA	TV	150	100

4. Display average sale of each product in each country. SQL Query:

SELECT country, product, AVG(profit) AS average_sale FROM Sales GROUP BY country, product ORDER BY country, product;

COUNTRY	PRODUCT	MAX_PROFIT	MIN_PROFIT
Finland	Computer	1500	1500
Finland	Phone	100	10
India	Calculator	75	75
India	Computer	1200	1200
USA	Calculator	75	50
USA	Computer	1500	1200
USA	TV	150	100

5. Find total profit product wise. SQL Query:

SELECT product, SUM(profit) AS total_profit FROM Sales GROUP BY product ORDER BY total_profit DESC;

PRODUCT	TOTAL_PROFIT
Computer	6900
Calculator	275
TV	250
Phone	110