LAB # 12

Task # 01:

Create Sample Database.

Create the table given below:

Employees Table				
Id	Name	Gender	Salary	Country
1	Mark	Male	5000	USA
2	John	Male	4500	India
3	Pam	Female	5500	USA
4	Sara	Female	4000	India
5	Todd	Male	3500	India
6	Mary	Female	5000	UK
7	Ben	Male	6500	UK
8	Elizabeth	Female	7000	USA
9	Tom	Male	5500	UK
10	Ron	Male	5000	USA

Retrieve Salary by country along with grand total by rollup

Query:

```
SELECT Country,SUM(salary)as TotalSalary FROM Employees group by rollup(Country)
```

Result:

	Country	TotalSalary
1	India	12000
2	UK	17000
3	USA	22500
4	NULL	51500

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Task # 02:

Create the following table given below and generate the output applying rollup query:

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Table name: result

Class	Section	Roll	Marks
1	A	1	40
1	A	2	30
1	A	3	20
1	B	1	40
1	B	2	30
1	B	3	30
2	A	1	20
2	A	2	60
2	A	3	40
2	B	1	20
2	B	2	30
2	B	3	20

Query:

```
SELECT Class,Section,SUM(MARKS)AS MARKS FROM Result GROUP BY ROLLUP(Class,Section)
```

Result:

	Class	Section	MARKS
1	1	A	90
2	1	B	100
3	1	NULL	190
4	2	A	120
5	2	B	70
6	2	NULL	190
7	NULL	NULL	380

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Task # 03:

Write a query to retrieve Sum of Salary grouped by all combinations of the following 2 columns as well as Grand Total. Country, Gender?

Query:

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```
SELECT Country,Gender,SUM(salary)asTotalSalary FROM Employeesgroupby cube(Country,Gender)
```

Result:

	Country	Gender	TotalSalary
1	India	Female	4000
2	UK	Female	5000
3	USA	Female	12500
4	NULL	Female	21500
5	India	Male	8000
6	UK	Male	12000
7	USA	Male	10000
8	NULL	Male	30000
9	NULL	NULL	51500
10	India	NULL	12000
11	UK	NULL	17000
12	USA	NULL	22500

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Task # 04:

Generate the output applying cube query:

Query:

```
SELECT Class,Section,SUM(MARKS)AS MARKS FROM Result GROUP BY CUBE(Class,Section)
```

Result:

	Class	Section	MARKS
1	1	A	90
2	2	A	120
3	NULL	A	210
4	1	B	100
5	2	B	70
6	NULL	B	170
7	NULL	NULL	380
8	1	NULL	190
9	2	NULL	190

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