

```
select sum(charge) as sum_of_charge,category from spectator50 group by
cube(spectator50.category);
```

	sum_of_charge	category
1	220	adult
2	2000	senior
3	900	student
4	3120	NULL

```
select sum(spec.charge) as sum_of_charge,spec.category,g.game_id from game_stat50
gs,game50 g,spectator50
spec,location50 l where gs.game_id=g.game_id and gs.spec_id=spec.spec_id and
gs.loc_id=l.loc_id
group by cube(spec.category,g.game_id);
```

	sum_of_charge	category	game_id
1	500	student	1
2	500	NULL	1
3	20	adult	2
4	500	student	2
5	520	NULL	2
6	400	student	3
7	400	NULL	3
8	2000	senior	4
9	2000	NULL	4
10	2000	senior	5
11	2000	NULL	5
12	5420	NULL	NULL
13	20	adult	NULL
14	4000	senior	NULL
15	1400	student	NULL

```
select sum(spec.charge),spec.category,g.game_id,l.stadium
from game_stat50 gs, spectator50 spec,game50 g,location50 l
where gs.game_id=g.game_id and
gs.spec_id=spec.spec_id and
gs.loc_id=l.loc_id
group by cube(spec.category,g.game_id,l.stadium);
```

	(No column name)	category	game_id	stadium
1	2000	senior	4	Abhijay Stadium
2	2000	NULL	4	Abhijay Stadium
3	2000	NULL	NULL	Abhijay Stadium
4	500	student	1	DY Patil
5	500	NULL	1	DY Patil
6	400	student	3	DY Patil
7	400	NULL	3	DY Patil
8	900	NULL	NULL	DY Patil
9	20	adult	2	Narendra Mo...
10	20	NULL	2	Narendra Mo...
11	2000	senior	5	Narendra Mo...
12	2000	NULL	5	Narendra Mo...
13	2020	NULL	NULL	Narendra Mo...
14	500	student	2	Wankhede
15	500	NULL	2	Wankhede
16	500	NULL	NULL	Wankhede
17	5420	NULL	NULL	NULL
18	20	adult	NULL	Narendra Mo...
19	20	adult	NULL	NULL
20	2000	senior	NULL	Abhijay Stadium
21	2000	senior	NULL	Narendra Mo...
22	4000	senior	NULL	NULL
23	900	student	NULL	DY Patil
24	500	student	NULL	Wankhede
25	1400	student	NULL	NULL
26	500	student	1	NULL
27	500	NULL	1	NULL
28	20	adult	2	NULL
29	500	student	2	NULL
30	520	NULL	2	NULL
31	400	student	3	NULL
32	400	NULL	3	NULL
33	2000	senior	4	NULL
34	2000	NULL	4	NULL
35	2000	senior	5	NULL
36	2000	NULL	5	NULL

## Rollup:

```
select sum(spec.charge) as sum_of_charge,spec.category,g.game_id,l.stadium
from game_stat50 gs, spectator50 spec,game50 g,location50 l
where gs.game_id=g.game_id and
gs.spec_id=spec.spec_id and gs.loc_id=l.loc_id
group by rollup(spec.category,g.game_id,l.stadium);
```

	sum_of_charge	category	game_id	stadium
1	20	adult	2	Narendra Modi Stadium
2	20	adult	2	NULL
3	20	adult	NULL	NULL
4	2000	senior	4	Abhijay Stadium
5	2000	senior	4	NULL
6	2000	senior	5	Narendra Modi Stadium
7	2000	senior	5	NULL
8	4000	senior	NULL	NULL
9	500	student	1	DY Patil
10	500	student	1	NULL
11	500	student	2	Wankhede
12	500	student	2	NULL
13	400	student	3	DY Patil

```
select sum(s.charge) as sum_of_charge ,s.category,g.game_name
from game_stat50 gs,spectator50 s,game50 g
where gs.game_id=g.game_id and gs.spec_id=s.spec_id
group by rollup(s.category,g.game_name);
```

	sum_of_charge	category	game_name
1	20	adult	Box Cricket
2	20	adult	NULL
3	2000	senior	Badminton
4	2000	senior	Chess
5	4000	senior	NULL
6	400	student	Basketball
7	500	student	Box Cricket
8	500	student	Cricket
9	1400	student	NULL
10	5420	NULL	NULL

**SLICE:**

```

select sum(spec.charge),spec.category,g.game_id,l.stadium
from game_stat50 gs, spectator50 spec,game50 g,location50 l
where gs.game_id=g.game_id and
gs.spec_id=spec.spec_id and
gs.loc_id=l.loc_id
group by rollup(spec.category,g.game_id,l.stadium)
having spec.category='student';

```

	(No column name)	category	game_id	stadium
1	500	student	1	DY Patil
2	500	student	1	NULL
3	500	student	2	Wankhede
4	500	student	2	NULL
5	400	student	3	DY Patil
6	400	student	3	NULL
7	1400	student	NULL	NULL

```

select sum(spec.charge),spec.category,g.game_id,l.stadium
from game_stat50 gs, spectator50 spec,game50 g,location50 l
where gs.game_id=g.game_id and
gs.spec_id=spec.spec_id and
gs.loc_id=l.loc_id
group by rollup(spec.category,g.game_id,l.stadium)
having g.game_id='3';

```

	(No column name)	category	game_id	stadium
1	400	student	3	DY Patil
2	400	student	3	NULL

```

select sum(spec.charge) as sum_of_charges,spec.category,g.game_id,l.stadium
from game_stat50 gs, spectator50 spec,game50 g,location50 l
where gs.game_id=g.game_id and
gs.spec_id=spec.spec_id and

```

```
gs.loc_id=l.loc_id
group by rollup(spec.category,g.game_id,l.stadium)
having l.stadium='DY Patil';
```

	(No column name)	category	game_id	stadium
1	500	student	1	DY Patil
2	400	student	3	DY Patil

## DICE:

```
select sum(spec.charge),spec.category,g.game_id,l.stadium
from game_stat50 gs, spectator50 spec,game50 g,location50 l
where gs.game_id=g.game_id and
gs.spec_id=spec.spec_id and
gs.loc_id=l.loc_id
group by cube(spec.category,g.game_id,l.stadium)
having l.stadium in('d y patil','vankhede') or
g.game_id in(1,2) or
spec.category in('student','adult');
```

	(No column name)	category	game_id	stadium
1	500	student	1	DY Patil
2	500	NULL	1	DY Patil
3	400	student	3	DY Patil
4	20	adult	2	Narendra Modi Stadium
5	20	NULL	2	Narendra Modi Stadium
6	500	student	2	Wankhede
7	500	NULL	2	Wankhede
8	20	adult	NULL	Narendra Modi Stadium
9	20	adult	NULL	NULL
10	900	student	NULL	DY Patil
11	500	student	NULL	Wankhede
12	1400	student	NULL	NULL
13	500	student	1	NULL
14	500	NULL	1	NULL
15	20	adult	2	NULL
16	500	student	2	NULL
17	520	NULL	2	NULL
18	400	student	3	NULL