**Knowledge Engineering LAB**

**Assignment 4**

**Q1.**

Solu.

A.

SELECT

"A2"."CITY" "CITY",

"A1"."ITEM\_NAME" "ITEM NAME",

SUM("A3"."DOLLARS\_SOLD") "SUM(DOLLARS\_SOLD)"

FROM

"SYSTEM"."SALES" "A3",

"SYSTEM"."LOCATION" "A2",

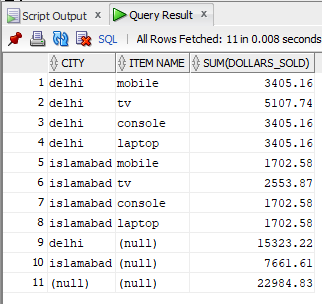
"SYSTEM"."ITEM" "A1"

GROUP BY

ROLLUP("A2"."CITY",

"A1"."ITEM\_NAME");

OUTPUT:



B.

SELECT

"A2"."CITY" "CITY",

SUM("A1"."DOLLARS\_SOLD") "SUM(DOLLARS\_SOLD)"

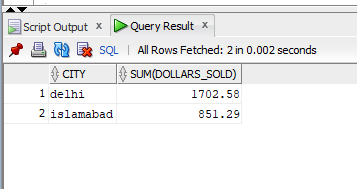
FROM

"SYSTEM"."SALES" "A1",

"SYSTEM"."LOCATION" "A2"

GROUP BY "A2"."CITY";

OUTPUT:

****

C.

SELECT

"A2"."ITEM\_NAME" "ITEM NAME",

SUM("A1"."DOLLARS\_SOLD") "SUM(DOLLARS\_SOLD)"

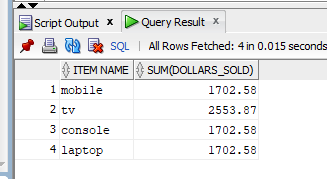
FROM

"SYSTEM"."SALES" "A1",

"SYSTEM"."ITEM" "A2"

GROUP BY "A2"."ITEM\_NAME";

OUTPUT:

****

D.

Maximum number of cells in the base cuboid: 3888

E.

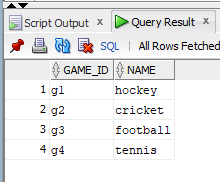
Minimum number of cells in the base cuboid: 1

**Q2**

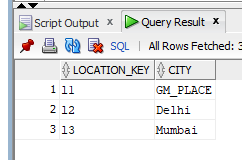
**Solu.**

**Tables and their data**

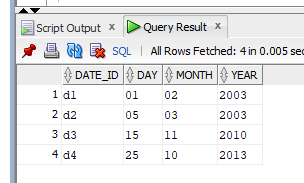
* Game Table

****

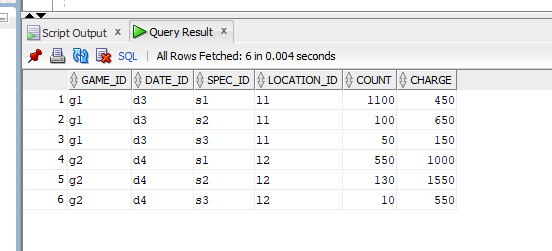
* Location\_Game Table

****

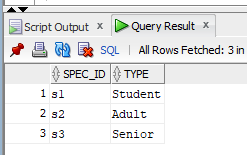
* Date\_Game Table

****

* Sales\_Game Table

****

* Spectator Table

****

i)

SELECT

SUM("A1".charge\*"A1".count)

FROM

"SYSTEM"."SALES\_GAME" "A1",

"SYSTEM"."LOCATION\_GAME" "A2",

"SYSTEM"."SPECTATOR" "A3",

"SYSTEM"."DATE\_GAME" "A4"

WHERE

(

"A2".city='GM\_PLACE' and

"A4".year='2010' and

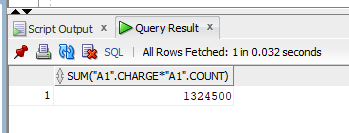
"A3".type='Student'

)

GROUP BY

"A2".city;

**OUTPUT:**

****

ii)

SELECT

"A1"."DAY" "DAY",

"A1"."MONTH" "MONTH",

"A1"."YEAR" "YEAR",

SUM("A2"."CHARGE" \* "A2"."COUNT") "SUM( A2 .CHARGE\* A2 .COUNT)"

FROM

"SYSTEM"."SALES\_GAME" "A2",

"SYSTEM"."DATE\_GAME" "A1"

WHERE

"A2"."DATE\_ID" = "A1"."DATE\_ID"

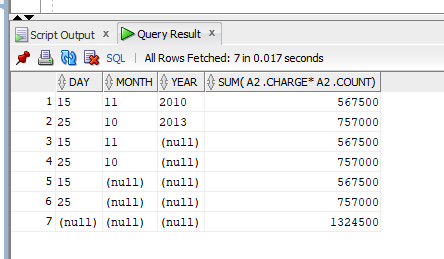
GROUP BY

ROLLUP("A1"."DAY",

"A1"."MONTH",

"A1"."YEAR");

**OUTPUT:**

****

iii)

SELECT

"A1"."TYPE",

AVG("A2"."CHARGE" \* "A2"."COUNT")

FROM

"SYSTEM"."SALES\_GAME" "A2",

"SYSTEM"."SPECTATOR" "A1"

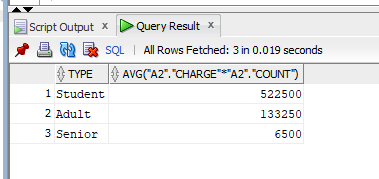
WHERE

"A1".SPEC\_ID="A2".SPEC\_ID

GROUP BY

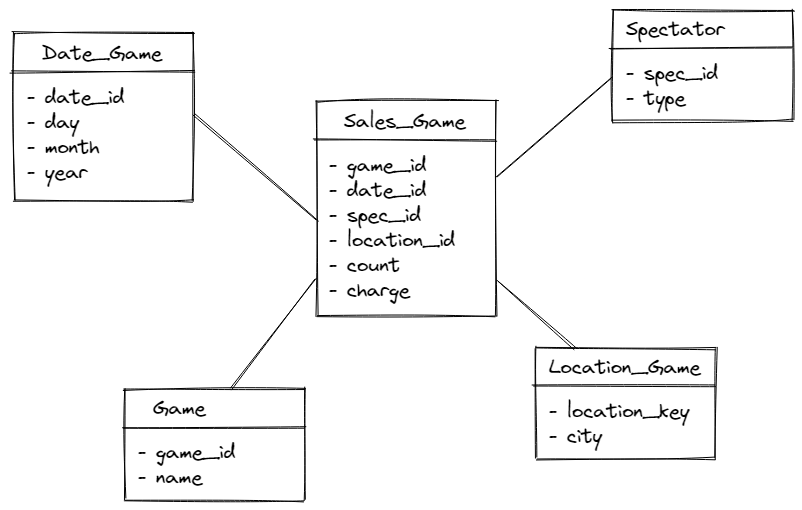
"A1"."TYPE";

**OUTPUT:**

****

iv)

Snowflake diagram for the above datawarehouse

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