

Ques 1: To gain a comprehensive understanding of the factors influencing hospitalization costs

a. Merge the two tables by first identifying the columns in the data tables that will help you in merging

b. In both tables, add a Primary Key constraint for these columns

MySQL Workbench

Local instance MySQL80 (capstonek)Local instance MySQL80 (capstonek)

FileEditViewQueryDatabaseServerToolsScriptingHelp

Navigator

Filter objects

SCHEMAS

capstone

Tables

Views

Stored Procedures

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employee

sdcrc

sdcrc_old

sys

AdministrationSchemas

Information

No object selected

Query 1

add constraint pk_medical_examinations primary key(customer_id);

-- Ques 1: merging two table for further analysis as per project requirement

select * from hospitalisation_details hd

inner join medical_examinations me on hd.customer_id = me.customer_id;

/* Q.2 - Retrieve information about people who are diabetic and have heart problems with their average age, the average number of dependent children, average BMI, and average hospitalization costs */

select me.HBA1C, me.heart_issue, avg(me.BMI) , avg(hd.children), avg(hd.charges) from hospitalisation_details hd

inner join medical_examinations me on hd.customer_id = me.customer_id

where me.HBA1C > 6.5 and me.heart_issue = "yes"

group by me.HBA1C , me.heart_issue;

/* Q.3 Find the average hospitalization cost for each hospital tier and each city level */

Result Grid

Filter Rows

Export

Wrap Cell Content

Fetch rows

customer_id	year	month	date	children	charges	hospital_tier	city_tier	state_id	customer_id	BMI	HBA1C	heart_issue	any_transplants	cancer_history	NumberO
Id1	1968	Oct	12	0	63770.43	tier - 1	tier - 3	R1013	Id1	47.41	7.47	No	No	No	No major s
Id10	1978	Dec	29	0	48885.14	tier - 1	tier - 2	R1013	Id10	38.06	10.79	No	No	No	No major s
Id100	1977	Jun	27	2	40284.38	tier - 1	tier - 3	R1012	Id100	48.2	4.84	No	No	No	No major s
Id1000	1989	Dec	17	3	11250.43	tier - 3	tier - 2	R1026	Id1000	39.17	4.15	No	No	No	No major s
Id1001	1969	Dec	30	2	11244.38	tier - 3	tier - 1	R1016	Id1001	26.41	5.99	yes	No	Yes	1

Result 9

Output

Action Output

#TimeAction

2611:44:21select * from hospitalisation_details hd inner join medical_examinations me on hd.customer_id = me.customer_id;1000 row(s) returned

Message

Duration / Fetch

0.000 sec / 0.000 sec

Query Completed

Ques 2. Retrieve information about people who are diabetic and have heart problems with their average age, the average number of dependent children, average BMI, and average hospitalization costs

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Query 1

/* Q.2 - Retrieve information about people who are diabetic and have heart problems with their average age, the average number of dependent children, average BMI, and average hospitalization costs */

select me.HBA1C, me.heart_issue, avg(me.BMI) , avg(hd.children), avg(hd.charges) from hospitalisation_details hd

inner join medical_examinations me on hd.customer_id = me.customer_id

where me.HBA1C > 6.5 and me.heart_issue = "yes"

group by me.HBA1C , me.heart_issue;

/* Q.3 Find the average hospitalization cost for each hospital tier and each city level */

select hospital_tier,city_tier, avg(charges) as average_cost from hospitalisation_details

group by hospital_tier,city_tier;

/* Q.4 Determine the number of people who have had major surgery with a history of cancer */

Result Grid

Filter Rows

Export

Wrap Cell Content

HBA1C	heart_issue	avg(me.BMI)	avg(hd.children)	avg(hd.charges)
7.32	yes	28.626666666666665	1.6667	7998.866666666666
8	yes	33.83	1.0000	28504.266666666663
9.81	yes	22.805	0.0000	20854.115
8.77	yes	39.635000000000005	1.0000	26561.274999999998
11.81	yes	32.67	1.0000	10807.49
8.26	yes	33.29833333333334	1.6667	16224.043333333333

Result 10

Output

Action Output

#TimeAction

2711:44:56select * from hospitalisation_details hd inner join medical_examinations me on hd.customer_id = me.customer_id;1000 row(s) returned

Message

Duration / Fetch

0.000 sec / 0.000 sec

Query Completed

Ques 3. Find the average hospitalization cost for each hospital tier and each city level

MySQL Workbench

Local instance MySQL80 (capstonek) Local instance MySQL80 (cap... x

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Administration Schemas Information

No object selected

Query 1

```
/* Q.3 Find the average hospitalization cost for each hospital tier and each city level */
select hospital_tier,city_tier, avg(charges) as average_cost from hospitalisation_details
group by hospital_tier,city_tier;

/* Q.4 Determine the number of people who have had major surgery with a history of cancer */
select count(NumberOfMajorSurgeries) as number_of_people from medical_examinations
where cancer_history = 'Yes';

/* Q.5-Determine the number of tier-1 hospitals in each state */
select state_id, count(hospital_tier) as tier_1_hospital from hospitalisation_details
where hospital_tier = 'tier - 1'
group by state_id;
```

Result Grid

hospital_tier	city_tier	average_cost
tier - 1	tier - 3	31868.141981982008
tier - 1	tier - 2	29014.500471698106
tier - 3	tier - 2	9283.427477777777
tier - 3	tier - 1	9775.389793389431
tier - 3	tier - 3	9342.179912230704
tier - 1	tier - 1	29519.600813953486

Result 11 x

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
28	11:45:15	select me.HBA1C, me.heart_issue, avg(me.BMI) , avg(hd.children), avg(hd.charges) from hospitalisation_d...	237 row(s) returned	0.015 sec / 0.000 sec

Query Completed

Ques 4. Determine the number of people who have had major surgery with a history of cancer

MySQL Workbench

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No object selected

Query 1

```
select hospital_tier,city_tier, avg(charges) as average_cost from hospitalisation_details
group by hospital_tier,city_tier;

/* Q.4 Determine the number of people who have had major surgery with a history of cancer */
select count(NumberOfMajorSurgeries) as number_of_people from medical_examinations
where cancer_history = 'Yes';

/* Q.5-Determine the number of tier-1 hospitals in each state */
select state_id, count(hospital_tier) as tier_1_hospital from hospitalisation_details
where hospital_tier = 'tier - 1'
group by state_id;

-- END OF SQL PART OF PROJECT --
```

Result Grid

number_of_people
391

Result 12 x

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
29	11:46:16	select hospital_tier,city_tier, avg(charges) as average_cost from hospitalisation_details group by hospital_t...	3 row(s) returned	0.000 sec / 0.000 sec

Query Completed

Ques 5. Determine the number of tier-1 hospitals in each state

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Information

No object selected

Query 1

Limit to 1000 rows

90

91 /* Q.3 Find the average hospitalization cost for each hospital tier and each city level */

92

93 select hospital_tier,city_tier, avg(charges) as average_cost from hospitalisation_details

94 group by hospital_tier,city_tier;

95

96 /* Q.4 Determine the number of people who have had major surgery with a history of cancer */

97

98 select count(NumberOfMajorSurgeries) as number_of_people from medical_examinations

99 where cancer_history = 'Yes';

100

101 /* Q.5-Determine the number of tier-1 hospitals in each state */

102

103 select state_id, count(hospital_tier) as tier_1_hospital from hospitalisation_details

104 where hospital_tier = 'tier - 1'

105 group by state_id;

106

SQLAdditions

My Snippets

Result Grid

Filter Rows

Export: Wrap Cell Content

state_id tier_1_hospital

R1013 68

R1012 63

R1011 116

R1014 10

R1017 7

R1015 2

Result 13

Read Only Context Help Snippets

Output

Action Output

Time Action Message Duration / Fetch

30 11:46:36 select count(NumberOfMajorSurgeries) as number_of_people from medical_examinations where cancer_hi... 1 row(s) returned 0.000 sec / 0.000 sec

Query Completed