create database project1;

DELETE FROM project1.`hospitalisation details` WHERE `Customer ID` IS NULL OR `Customer ID` IN (

SELECT `Customer ID` FROM (

SELECT `Customer ID`, ROW\_NUMBER() OVER (PARTITION BY `Customer ID` ORDER BY `Customer ID`) AS row\_num

FROM project1.`hospitalisation details`

) t WHERE row\_num > 1

);

DELETE FROM project1.`medical examinations` WHERE `Customer ID` IS NULL OR `Customer ID` IN (

SELECT `Customer ID` FROM (

SELECT `Customer ID`, ROW\_NUMBER() OVER (PARTITION BY `Customer ID` ORDER BY `Customer ID`) AS row\_num

FROM project1.`medical examinations`

) t WHERE row\_num > 1

);

ALTER TABLE project1.`hospitalisation details`

MODIFY COLUMN `Customer ID` VARCHAR(100) NOT NULL,

ADD PRIMARY KEY (`Customer ID`);

ALTER TABLE project1.`medical examinations`

MODIFY COLUMN `Customer ID` VARCHAR(100) NOT NULL,

ADD PRIMARY KEY (`Customer ID`);

**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**

ALTER TABLE project1.`hospitalisation details` ADD age INT;

DELETE FROM project1.`hospitalisation details`

WHERE month = '?';

UPDATE project1.`hospitalisation details`

SET age = TIMESTAMPDIFF(YEAR, STR\_TO\_DATE(CONCAT(year, '-', SUBSTRING(month, 1, 3), '-01'), '%Y-%b-%d'), CURDATE());

select \* from project1.`hospitalisation details`;

select avg(t1.age) as 'avg\_age',avg(children) as 'avg\_children',

avg(BMI) as 'avg\_bmi',avg(charges) as 'avg\_hospitalization\_cost' from project1.`hospitalisation details` t1

join project1.`medical examinations` t2

on t1.`Customer ID`=t2.`Customer ID`

where t2.HBA1C >6.5 and t2.`Heart Issues`='yes';

1. Average Age: The average age of the hospitalization patients is approximately 49.43 years. This indicates that the patient population is relatively mature.
2. Average Number of Dependent Children: On average, each patient has around 1.02 dependent children. This suggests that the majority of patients have limited family responsibilities.
3. Average BMI: The average body mass index (BMI) among the patients is approximately 31.36. This indicates that, on average, the patients are in the overweight category.
4. Average Hospitalization Costs: The average hospitalization cost for the patients is approximately $16,340.40. This suggests that the cost of medical treatment and care is relatively significant for the given population

**Find the average hospitalization cost for each hospital tier and each city level**

DELETE FROM project1.`hospitalisation details`

WHERE `Hospital tier` = '?';

select `Hospital tier` , `City tier`,avg(charges) as 'avg\_hospitalization\_cost' from project1.`hospitalisation details`

group by `Hospital tier` , `City tier`;

**Determine the number of** **people who have had major surgery with a history of cancer**

SELECT count(\*) FROM project1.`medical examinations`

where NumberOfMajorSurgeries >=1 and `Cancer history`='yes';

391 people who have had major surgery with a history of cancer

**Determine the number of tier-1 hospitals in each state**

SELECT `State ID`,count(\*) as'No of tier1 hospital' FROM project1.`hospitalisation details`

where `Hospital tier` = 'tier - 1'

group by `State ID`;