

```

create database HIA;
use HIA;
select * from `hospitalisation details`;
select * from `medical examinations`;
select * from names;

```

```

alter table names rename column name to Name ;
alter table names rename column `id` to `Customer ID` ;

```

```

ALTER TABLE `hospitalisation details`
ADD COLUMN `Age` INT;

```

```

UPDATE `hospitalisation details`
SET `Age` = YEAR(CURDATE()) - `year`;

```

#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

```

SELECT
    h.`Customer ID`,
    h.children,
    h.charges,
    h.`Hospital tier`,
    h.`City tier`,
    h.`State ID`,
    d.BMI,
    d.HBA1C,
    d.`Heart Issues`,
    d.`Any Transplants`,
    d.`Cancer history`,
    d.NumberOfMajorSurgeries,
    d.smoker
FROM
    `hospitalisation details` h
INNER JOIN
    `medical examinations` d ON h.`Customer ID`= d.`Customer ID`;

```

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

-- Adding a primary key to the Hospitalizations table

```

ALTER TABLE `hospitalisation details`
ADD CONSTRAINT PK_CustID PRIMARY KEY (`Customer ID`(10));

```

-- Adding a primary key to the HealthDetails table

```

ALTER TABLE `medical examinations`
ADD CONSTRAINT PK_CustomerID PRIMARY KEY (`Customer ID`(10));

```

#Deleting the row where the customer Id=?.

```

select * from `hospitalisation details` where `Customer ID` = '?';
delete from `hospitalisation details` where `Customer ID` = '?';

```

#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
    AVG(hd.`Age`) AS AverageAge,
    AVG(hd.`children`) AS AverageChildren,
    AVG(me.`BMI`) AS AverageBMI,
    AVG(hd.`charges`) AS AverageHospitalizationCosts
FROM
    `hospitalisation details` hd
JOIN
    `medical examinations` me ON hd.`Customer ID` = me.`Customer ID`
WHERE
    me.`HBA1C` >= 6.5
    AND me.`Heart Issues` = 'Yes';
```

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

```
SELECT
    `Hospital tier`,
    `City tier`,
    AVG(`charges`) AS AverageHospitalizationCost
FROM
    `hospitalisation details`
GROUP BY
    `Hospital tier`,
    `City tier` ;
```

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

```
SELECT COUNT(*) AS NumberOfPeople
FROM `medical examinations`
WHERE `Cancer History` = 'Yes'
    AND `NumberOfMajorSurgeries` > 0;
```

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

```
SELECT
    `State ID`,
    COUNT(DISTINCT `Hospital tier`) AS NumberOfTier1Hospitals
FROM
    `hospitalisation details`
WHERE
    `Hospital Tier` = 'tier - 1'
GROUP BY
    `State ID`;
```