**# Basic SQL queries**

Create table table0(

Col1 int ,

Col2 char(5),

Col3 varchar(10),

Primary key (col1))

**# foreign key including**

Create table table4(

Col1 int ,

Col2 char(5),

Col3 varchar(10),

Primary key (col1),

foreign key (col1) references table2)

# note: **primary key (col1)** ----ok, but with out parenthesis in like **primary key col1** is wrong. Applicable for foreign key too.

**# insert into tables**

Insert into table1 (col1, col2) values (2,3)

**# deleting a row which has id index == “Adarsh”**

delete from table1 where id==”Adarsh”;

**# Alter a table**

Alter table table1 add colnew1, char(5)

Alter table table1 drop column col1

Alter table table3 drop column col1

**# select from data table**

Select \* from tabl1 where id==”10211”

Select col1 from data1

Select \* from table1,table3

#  **more codes**

Select col1, col2

From table1 as t1 , table2 as t2,

Where t1.col1> t2.col1

And

T2.col2==”Adarsh”

#pracrice

**Table1**

|  |  |
| --- | --- |
| **Name** | **teacher** |
| **A** | **Yamini** |
| **B** | **Sultan** |
| **C** | **Swati** |

**Task:**  select teacher of a

**Code:**

Select teacher

From table1

Where name==”a”

**Q courses that in fall 2009 or in spring 2010**

(Select courses

from table1

where period =”fall 2009” )

union

(select courses

from table1

where period= “spring 2010”)

**Q courses that in fall 2009 and in spring 2010**

(Select courses

from table1

where period =”fall 2009” )

intersection

(select courses

from table1

where period= “spring 2010”)

**Q courses that in fall 2009 but not in spring 2010**

(Select courses

from table1

where period =”fall 2009” )

except

(select courses

from table1

where period= “spring 2010”)

# **Null values**

**Select \***

**from**  table1

Where col1 is null

**# aggregiate function**

Select mean(col1)

From t1

Where dept=”cs”

Select count(distinct col1)

From t1

Where dept=”cs”

# **count total no rows**

Select count(\*)

From t1

# **group by**

Select col1, avg(col2) as a2

From t1

**Group b**y col1

# **having clause(used**  after formation of group**)**

Select col1, mean(col2)

From t1

Group by col1

Having mean(col2)>20000

# **q name of buildingn gaving class czpacity less than 100**

Select distinct building

From t1

Where class< 100

**# method 2, imclude all dublicate**

Select all building

From t1

Where class< 100

**# question: from instructor and department relations find name of al instructors whose dept is fiancé or dept in any of the following building , b1,b2**

Select name

From instructor and department

Where (dept.dept ==”finance” or dept.building in (“b1”,”b2”)) and (dept. name ==instructor.name)

instruct

|  |  |
| --- | --- |
| name | xyz |
|  |  |
|  |  |

dept

|  |  |  |
| --- | --- | --- |
| name | dept | build |
|  |  |  |
|  |  |  |

# question : from course relation select title of all courses whose course id has three alphbet indicating dept

Selecttitle

From course

Where course\_id **like**  ”\_ \_ \_ -%” **# ”\_ \_ \_ -” must have starting 3 unit following hyphen(-).**

**# question: list of students in alphbetric order of department within each dept decreasing order of total credit.**

Select name

From tb1

Order by dpet asec, credit desc

**# Q find id of stufent wo took courses in fall or summer and year 2020**

Select id

From t1

Where semester in (“fall”,”summer”) and year 2020

**Method 2 using union**

(Select id

From t1

Where semester == “fall” and year 2020)

**union**

(

Select id

From t1

Where semester “summer” and year 2020

)

#  **Select prof from cse or ece with salary>2000 using intersect**

(Select prof

From t1

Where dept in (“cse”,”ece”))

**Intersect**

(Select prof

From t1

Where salary>30000

)

#  **Select prof from cse or ece with salary<2000 and salary >1000000 using intersect**

(Select prof

From t1

Where dept in (“cse”,”ece”))

**except**

(Select prof

From t1

Where slalry >100000 and slalry < 20000

)

**# Question : name and average capacity of each building whse average capacu=ity is greTER THAN 25**

Select name, avg(capacity) as building\_average

From t1

Group by name

Having avg(capacity )>25

# practice

Select min(col1) as min\_data

From table1

#

Select avg(col1) as min\_data

From table1

**# no of courses run in each building**

Select building, count(courses) as count\_data

From table1

Group by courses

**# total credit offered by each dept**

Select dept, sum(credit) as count\_data

From table1

Group by dept

