delimiter $$

create function sf\_getdeptsal(v\_eid int)

returns varchar(100)

READS SQL DATA

begin

declare v\_dept varchar(100);

declare v\_sal int;

select deptname,salary into v\_dept,v\_sal from emp join dept

on emp.deptid=dept.deptid

where eid=v\_eid;

return(concat('the deptname is ' ,v\_dept ,' and salary is ' ,v\_sal));

end;

$$

delimiter ;

select sf\_getdeptsal(1);

-- write a function that takes input two numbers and returns

-- whether the two numbers are co-prime or not

select eid,ename,sf\_getdept(eid) from emp limit 10;

select sf\_getdept(1);

drop function sf\_checkcoprime;

delimiter $$

create function sf\_checkcoprime(num1 int,num2 int)

returns varchar(100)

deterministic

begin

declare i int default 2;

declare lowest int;

if num1>num2 then

set lowest=num2;

else

set lowest=num1;

end if;

while(i<=lowest)

do

if mod(num1,i)=0 and mod(num2,i)=0 then

return(concat(num1,' and ' , num2 ,' are not co-prime numbers'));

end if;

set i=i+1;

end while;

return(concat(num1,' and ' , num2, ' are co-prime numbers'));end;

$$

delimiter ;

select sf\_checkcoprime(5,10);

-- write a function which takes input a number

-- number could be any number upto 9 digits

-- function should return the number in words in Indian notation

--e.g. 1234

one thousand two hundred and thirty four

9823456

Ninty Eight Lakhs Twenty Three Thousand Four Hundred and Fifty Six

drop procedure sp\_checkcoprime;

delimiter $$

create procedure sp\_checkcoprime(num1 int,num2 int)

deterministic

begin

declare i int default 2;

declare lowest int;

declare flag int default 0;

if num1>num2 then

set lowest=num2;

else

set lowest=num1;

end if;

while(i<=lowest and flag=0)

do

if mod(num1,i)=0 and mod(num2,i)=0 then

select (concat(num1,' and ' , num2 ,' are not co-prime numbers')) Result;

set flag=1;

end if;

set i=i+1;

end while;

if flag=0 then

select (concat(num1,' and ' , num2, ' are co-prime numbers')) Result;

end if;

end;

$$

delimiter ;

call sp\_checkcoprime(4 , 10);

call sp\_checkcoprime(4 , 11);

-- write a procedure that takes input a number and does the following job

–1. Truncate table emp

–2. Insert as many rows in the emp as the input number

–3. Data in the emp table should be as follow

–3.1 eid- 1,2,3,4,5,6… n

–3.2 ename- a1,b2,c3,... z26,a27,b28,...

–3.3 salary- random number - 13233,23232,3244,55554.

–3.4 deptid- 1,2,3,1,2,3,1,2,3,.....

–4. Commit should happen after every 50000 rows

Drop procedure sp\_loademp;

delimiter $$

Create procedure sp\_loademp(rec int)

Begin

Declare i int default 1;

Truncate table emp;

Start transaction;

While (i<=rec)

Do

Insert into emp(eid,ename,salary,deptid)

values(i,concat(convert(char(((i-1)%26)+97), char),i),

rand()\*1000000,

((i-1)%3)+1);

If mod(i,50000)=0 then

Commit;

Start transaction;

End if;

Set i=i+1;

End while;

commit;

end;

$$

delimiter ;

Call sp\_loademp(500000);

–Q32. Write a query that uses a subquery to obtain all orders for the customer named Cisneros.

Assume you do not know his customer number.

Select \* from orders

Where cnum in(select cnum from customers

Where cname='Cisneros');

–Q25. Find all customers located in cities where Serres (SNUM 1002) has customers.

Select \* from customers where city in (select c.city from salespeople s, customers c where

c.snum=s.snum and

sname='Serres');

–Q36. Select all the possible combinations of customers that you can assign.

Select c1.cname,c2.cname

From customers c1, customers c2

Where c1.cname<c2.cname;

–Q42. Find all orders with above average amounts for their customers.

Select \* from orders o

Where

amt>(select avg(amt) from orders i

Where o.cnum=i.cnum);

–Q44. Write a query that calculates the amount of the salesperson’s commission on each order by a

customer with a rating above 100.00.

Select sname,onum,comm\*amt

From

Orders o join salespeople s

On o.snum=s.snum

Join customers c

On o.cnum=c.cnum

And

s.snum=c.snum

Where rating>100;

Select sname,onum,comm\*amt

From

Orders o ,salespeople s

, customers c

Where

o.snum=s.snum and

o.cnum=c.cnum

And

s.snum=c.snum

and

rating>100;

–Q46. Write a query that produces all pairs of salespeople with themselves as well as duplicate rows

with the order reversed.

Select s1.sname,s2.sname

From salespeople s1 , salespeople s2;

Assignment for Day 5

| |  | | --- | | | |
| --- | --- | --- | --- |

1. Revise Slides

2. Revise all Normal Forms

3. Revise CODDs Rule

4. Do queries and programs(functions/Procedures) done in the class- <https://docs.google.com/document/d/1GRGmINEzVCe2ne851cmHWwxwupiUU5WwnJbxFbvaYZA/edit>

5. Revise Data Types

6. Revise Isolation Levels

7. Pre-Read Data Models

8. Complete all 125 Queries

9. Do the assignment on function to convert upto 9 digits number to words in Indian notation in your groups. To be completed by Sunday Morning India Time