5.1 Each insertion of professor information, the data are inserted into not only professor table but also into faculty_insurance table that credit_limit value is calculated from 300% of his/her salary and ins_plan is ”Group Insurance for Instructor”. (**trigger name: new_professor_added)

```
CREATE TRIGGER new_professor_added
AFTER INSERT ON Professor
FOR EACH ROW
insert into faculty_insurance (ref_id,ins_plan, credit_limit,duedate,s_timestamp,status)
values (new.pid,"Group Insurance for Instructor",new.salary*3,DATE_ADD(SYSDATE(),
INTERVAL 4
YEAR),SYSDATE(),'A');
```

```
INSERT INTO Professor (pid,pname,salary) VALUES ('123','foo',1000);
```

SELECT * FROM Professor;

pid	pname	salary
001	Michael	35000
002	Simon	40000
003	William	25000
004	Ken	40000
005	Steve	50000
123	foo	1000
NULL	NULL	NULL

SELECT * FROM faculty_insurance;

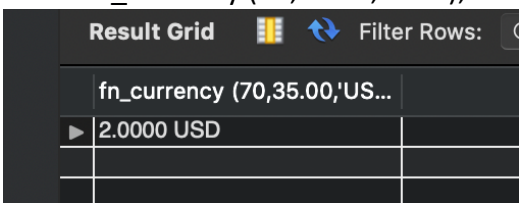
Result Grid | Filter Rows: Search | Edit: | Export/Import:

ref_id	ins_plan	credit_limit	duedate	s_timestamp	status
001	initial value by system	40000.00	2024-03-31	2020-03-31 16:35:37	A
002	initial value by system	40000.00	2024-03-31	2020-03-31 16:35:37	A
003	initial value by system	40000.00	2024-03-31	2020-03-31 16:35:37	A
004	initial value by system	40000.00	2024-03-31	2020-03-31 16:35:37	A
005	initial value by system	40000.00	2024-03-31	2020-03-31 16:35:37	A
123	Group Insurance for Instructor	3000.00	2024-04-01	2020-04-01 03:23:12	A
55489317	initial value by system	20000.00	2024-03-31	2020-03-31 16:36:56	A
55748896	initial value by system	20000.00	2024-03-31	2020-03-31 16:36:56	N
56717931	initial value by system	20000.00	2024-03-31	2020-03-31 16:36:56	A
56756421	initial value by system	20000.00	2024-03-31	2020-03-31 16:36:56	A

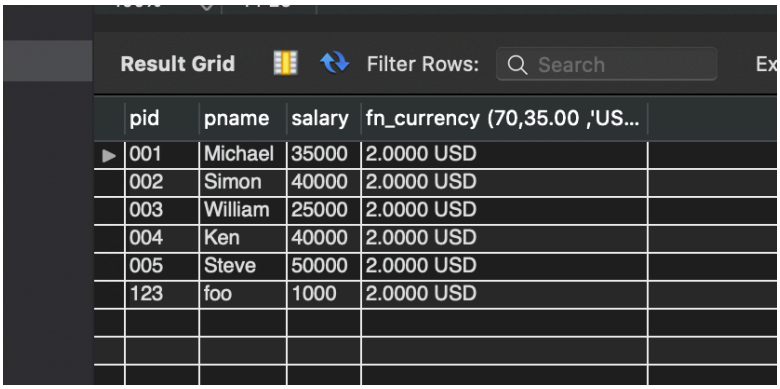
5.2 Convert the number declared in a numerical data type to other currencies using function named “fn_currency(input_number, exchange_rate, currency_name)” and return the result as string.

```
DELIMITER $$
CREATE FUNCTION fn_currency(input_number DECIMAL, exchange_rate
DECIMAL,currency_name VARCHAR (60))
RETURNS
varchar(50)
DETERMINISTIC
BEGIN
DECLARE currency varchar(50);
SET currency = CONCAT(CONCAT(input_number/exchange_rate,' '),currency_name);
RETURN currency;
END$$
DELIMITER ;
```

```
select fn_currency (70,35.00,'USD');
```




```
select *, fn_currency (70,35.00 ,'USD') from Professor;
```



5.3 Update salary of all professors who earns salary less than 30,000 up to 10% and update credit limit of insurance up to 400 % of new salary and alsoinsert log into system_log table that stores the old salary,new salary,old credit limit and new credit limit. Finally, the data stored procedure has to print the name, old salary, new salary and credit limit of all professor informationthat areupdated. (**procedure name: Proc_cal_professor_upvel)

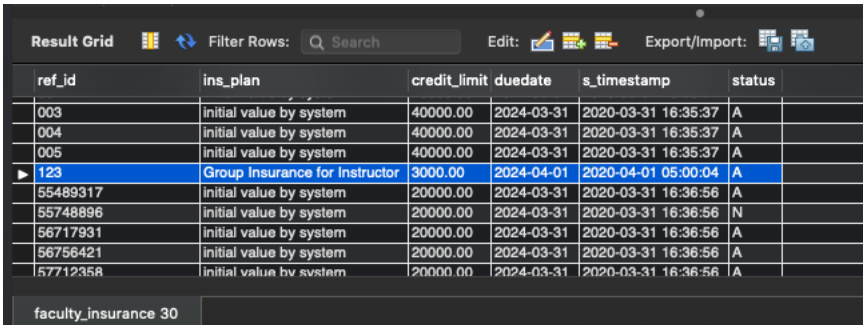
```
DELIMITER $$
DROP PROCEDURE IF EXISTS Proc_cal_professor_upvel;
CREATE PROCEDURE Proc_cal_professor_upvel()
DETERMINISTIC
BEGIN
if(select COUNT(salary) from Professor where salary<30000)>0 THEN
CREATE TEMPORARY TABLE IF NOT EXISTS TMP_PROFESSOR(PID varchar(16),salary
INT,credit_limit DECIMAL(10,2));
TRUNCATE TABLE TMP_PROFESSOR;

insert into TMP_PROFESSOR (PID,salary,credit_limit)
select DISTINCT pid,salary,credit_limit from Professor JOIN faculty_insurance ON pid=ref_id
where salary<30000;

update Professor set salary=salary*1.1 where pid IN (select PID from TMP_PROFESSOR);
update faculty_insurance JOIN Professor ON pid=ref_id set credit_limit=salary*4 WHERE
ref_id IN (SELECT PID FROM TMP_PROFESSOR);

INSERT INTO system_log (user_log, remark,timestamp)
select t.PID, CONCAT('old salary ',t.salary,' new salary ',p.salary,' old credit ',t.credit_limit,'
new credit ',f.credit_limit), SYSDATE() from TMP_PROFESSOR t JOIN Professor p ON
p.pid=t.PID JOIN faculty_insurance f ON ref_id=p.pid;

SELECT t.PID,pname,t.salary,p.salary,t.credit_limit,f.credit_limit,SYSDATE() FROM
TMP_PROFESSOR t JOIN Professor p ON t.PID=p.pid JOIN faculty_insurance f ON
ref_id=p.pid;
ELSE
select ' <30000 is empty';
END IF;
END$$
DELIMITER ;
```

SELECT * FROM Professor;

Result Grid | Filter Rows:

pid	pname	salary
001	Michael	35000
002	Simon	40000
003	William	25000
004	Ken	40000
005	Steve	50000
123	foo	1000
NULL	NULL	NULL

SELECT * FROM faculty_insurance;



Result Grid | Filter Rows: Search | Edit: | Export/Import:

ref_id	ins_plan	credit_limit	duedate	s_timestamp	status
003	initial value by system	40000.00	2024-03-31	2020-03-31 16:35:37	A
004	initial value by system	40000.00	2024-03-31	2020-03-31 16:35:37	A
005	initial value by system	40000.00	2024-03-31	2020-03-31 16:35:37	A
123	Group Insurance for Instructor	3000.00	2024-04-01	2020-04-01 05:00:04	A
55489317	initial value by system	20000.00	2024-03-31	2020-03-31 16:36:56	A
55748896	initial value by system	20000.00	2024-03-31	2020-03-31 16:36:56	N
56717931	initial value by system	20000.00	2024-03-31	2020-03-31 16:36:56	A
56756421	initial value by system	20000.00	2024-03-31	2020-03-31 16:36:56	A
57712358	initial value by system	20000.00	2024-03-31	2020-03-31 16:36:56	A

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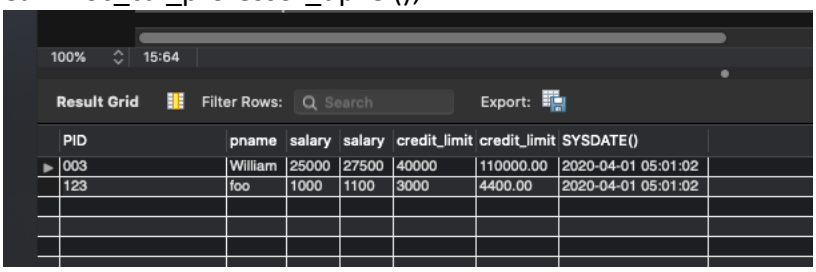
Call Proc_cal_professor_upvel();



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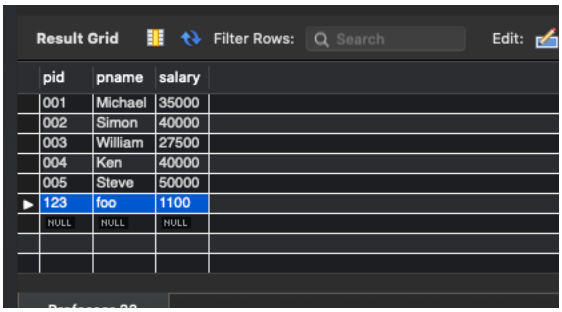
Result Grid | Filter Rows: Search | Export:

PID	pname	salary	salary	credit_limit	credit_limit	SYSDATE()
003	William	25000	27500	40000	110000.00	2020-04-01 05:01:02
123	foo	1000	1100	3000	4400.00	2020-04-01 05:01:02

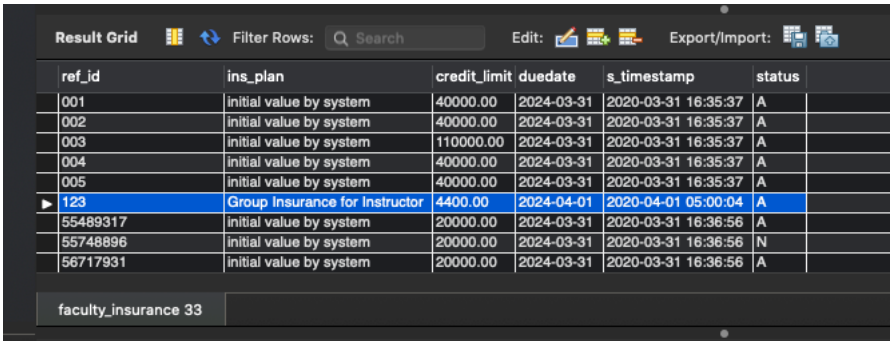
SELECT * FROM Professor;



Result Grid | Filter Rows: Search | Edit:

pid	pname	salary
001	Michael	35000
002	Simon	40000
003	William	27500
004	Ken	40000
005	Steve	50000
123	foo	1100
NULL	NULL	NULL

SELECT * FROM faculty_insurance;



Result Grid | Filter Rows: Search | Edit: | Export/Import:

ref_id	ins_plan	credit_limit	duedate	s_timestamp	status
001	initial value by system	40000.00	2024-03-31	2020-03-31 16:35:37	A
002	initial value by system	40000.00	2024-03-31	2020-03-31 16:35:37	A
003	initial value by system	110000.00	2024-03-31	2020-03-31 16:35:37	A
004	initial value by system	40000.00	2024-03-31	2020-03-31 16:35:37	A
005	initial value by system	40000.00	2024-03-31	2020-03-31 16:35:37	A
123	Group Insurance for Instructor	4400.00	2024-04-01	2020-04-01 05:00:04	A
55489317	initial value by system	20000.00	2024-03-31	2020-03-31 16:36:56	A
55748896	initial value by system	20000.00	2024-03-31	2020-03-31 16:36:56	N
56717931	initial value by system	20000.00	2024-03-31	2020-03-31 16:36:56	A

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