MY SQL

REPORT ON

LOAN MANAGEMENT SYSTEM

PROJECT :1

BY

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LOAN MANAGEMENT SYSTEM

LOAN STATUS

Sheet 2

- Create row level trigger for loan amt

-- CREATE TABLE FOR LOAN_STATUS

```
create table loan_status
(loan_id varchar(50),
 customer_id varchar(50),
 loan_amount int,
 loan_amount_term int,
 cibil_score int,
 primary key(customer_id));
```

-- CREATE TABLE FOR LOAN_STATUS UPDATE

```
CREATE TABLE LOAN_STATUS_UPDATE
(LOAN_ID VARCHAR(45),
LOAN_AMOUNT VARCHAR (20),
CIBIL_SCORE INT,
CIBIL_SCORE_STATUS VARCHAR(45),
PRIMARY KEY (LOAN_ID));
SHOW TABLES;
```

- Loan amt null = loan still processing

2.1-- ROW LEVEL TRIGGER FOR LOAN AMOUNT

```
DELIMITER //
CREATE TRIGGER LOAN_AMOUNT_CHANGE
BEFORE INSERT ON LOAN_STATUS
FOR EACH ROW
BEGIN
IF NEW.LOAN_AMOUNT IS NULL THEN SET
NEW.LOAN_AMOUNT ='LOAN STILL PROCESSING';
END IF ;
END //
DELIMITER ;
```

Criteria

- Create statement level trigger for cibil score
- Cibil score >900 high cibil score
- Cibil score >750 no penalty
- Cibil score >250 penalty customers
- Cibil score <=0 reject customers (loan cannot apply)

```
2.2-- STATEMENT TRIGGER FOR CIBIL SCORE STATUS
DELIMITER //
CREATE TRIGGER CIBIL_SCORE_UPDATE
AFTER INSERT ON LOAN_STATUS
FOR EACH ROW
BEGIN
IF NEW.CIBIL_SCORE >900 THEN
INSERT INTO LOAN_STATUS_UPDATE
(LOAN_ID,LOAN_AMOUNT,CIBIL_SCORE,CIBIL_SCORE_STATUS)VALUES
(NEW.LOAN_ID,NEW.LOAN_AMOUNT,NEW.CIBIL_SCORE,'HIGH CIBIL SCORE');
ELSEIF NEW.CIBIL_SCORE >750 THEN
INSERT INTO LOAN_STATUS_UPDATE
(LOAN_ID,LOAN_AMOUNT,CIBIL_SCORE,CIBIL_SCORE_STATUS)VALUES
(NEW.LOAN_ID,NEW.LOAN_AMOUNT,NEW.CIBIL_SCORE,'NO PENALTY ');
ELSEIF NEW.CIBIL_SCORE >250 THEN
INSERT INTO LOAN_STATUS_UPDATE
(LOAN_ID,LOAN_AMOUNT,CIBIL_SCORE,CIBIL_SCORE_STATUS)VALUES
(NEW.LOAN_ID,NEW.LOAN_AMOUNT,NEW.CIBIL_SCORE,'PENALTY CUSTOMERS');
ELSE INSERT INTO LOAN_STATUS_UPDATE
(LOAN_ID,LOAN_AMOUNT,CIBIL_SCORE,CIBIL_SCORE_STATUS)VALUES
(NEW.LOAN_ID,NEW.LOAN_AMOUNT,NEW.CIBIL_SCORE,'REJECT CUSTOMER');
END IF ;
END //
DELIMITER ;
show TRIGGERS;
show TRIGGERS;
show TABLES;
select*FROM LOAN_STATUS;
select*FROM LOAN_STATUS_UPDATE;

2.3UPDATE LOAN_AMOUNT AS VARCHAR
ALTER TABLE LOAN_STATUS_UPDATE MODIFY LOAN_AMOUNT varchar(50);
describe LOAN_STATUS;

insert into loan_status values
```

```
('LP001002',  'IP43001',  Null,  360,  303),
('LP001003',  'IP43002',  128,   360,  920),
('LP001005',  'IP43003',  66,    360,  606),
('LP001006',  'IP43004',  120,   360,  851),
('LP001008',  'IP43005',  141,   360,  420),
('LP001011',  'IP43006',  267,   360,  173),
```

Criteria

```
-- delete FOR REJECT CUSTOMER AND LOAN STILL PROCESSING CUSTOMER

DELETE FROM LOAN_STATUS_UPDATE

WHERE LOAN_AMOUNT ='LOAN STILL PROCESSING' OR CIBIL_SCORE_STATUS ='REJECT CUSTOMERS';

select*FROM LOAN_STATUS_UPDATE;

-- UPDATE LOAN AMOUNT AS INTEGER

ALTER TABLE LOAN_STATUS_UPDATE MODIFY LOAN_AMOUNT INT;

- CREATE NEW TABLE LOAN CIBIL SCORE STATUS

CREATE TABLE LOAN_CIBIL_SCORE_STATUS AS SELECT A.LOAN_ID,A.CUSTOMER_ID,A.LOAN_AMOUNT,A.LOAN_AMOUNT_TERM,A.CIBIL_SCORE, B.CIBIL_SCORE_STATUS

FROM LOAN_STATUS A JOIN LOAN_STATUS_UPDATE B

ON A.LOAN_ID = B.LOAN_ID;

select*FROM LOAN_CIBIL_SCORE_STATUS;
```

2.4-*Table name - loan cibil score status details

LOAN_ID	CUSTOMER_ID	LOAN_AMOUNT	LOAN_AMOUNT_TERM	CIBIL_SCORE	CIBIL_SCORE_STATUS
LP001003	IP43002	128	360	920	HIGH CIBIL SCORE
LP001005	IP43003	66	360	606	PENALTY CUSTOMERS
LP001006	IP43004	120	360	851	NO PENALTY
LP001008	IP43005	141	360	420	PENALTY CUSTOMERS
LP001011	IP43006	267	360	173	REJECT CUSTOMER
LP001013	IP43007	95	360	650	PENALTY CUSTOMERS
LP001014	IP43008	158	360	471	PENALTY CUSTOMERS
LP001018	IP43009	168	360	863	NO PENALTY
LP001020	IP43010	349	360	730	PENALTY CUSTOMERS

Customer income status

Sheet 1

1.1Import table from sheet 1- customer income status

```
select * FROM CUSTOMER_INCOME_STATUS;
```

Criteria:1

1.2set customer criteria based on applicant income

Applicant income >15,000 = grade a

- Applicant income >9,000 = grade b
- Applicant income >5000 = middle class customer
- Otherwise low class

```
SELECT *,IF(ApplicantIncome>15000,'GRADE A',
IF(ApplicantIncome>9000,'GRADE B',
IF(ApplicantIncome>5000,'MIDDLE CLASS CUSTOMER','LOW CLASS'))) AS
INCOME_STATUS
FROM CUSTOMER_INCOME_STATUS;
```

Loan_ID	Customer_ID	ApplicantIncome	CoapplicantIncome	Property_Area	Loan_Status	INCOME_STATUS
LP001002	IP43001	5849	0	Urban	Y	MIDDLE CLASS CUSTOMER
LP001003	IP43002	4583	1508	Rural	N	LOW CLASS
LP001005	IP43003	3000	0	Urban	Y	LOW CLASS
LP001006	IP43004	2583	2358	Urban	Y	LOW CLASS
LP001008	IP43005	6000	0	Urban	Y	MIDDLE CLASS CUSTOMER
LP001011	IP43006	5417	4196	Urban	Y	MIDDLE CLASS CUSTOMER
LP001013	IP43007	2333	1516	Urban	Y	LOW CLASS
LP001014	IP43008	3036	2504	Semiurban	N	LOW CLASS
LP001018	IP43009	4006	1526	Urban	Y	LOW CLASS

1.3- (CREATE THIS AS NEW TABLE)

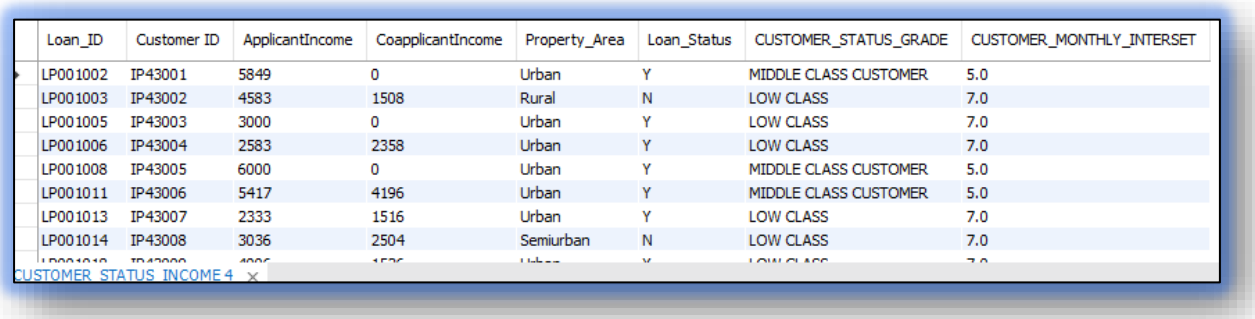
```
CREATE TABLE CUSTOMER_STATUS_INCOME AS SELECT
*,IF(ApplicantIncome>15000,'GRADE A',

IF(ApplicantIncome>9000,'GRADE B',

IF(ApplicantIncome>5000,'MIDDLE CLASS CUSTOMER','LOW CLASS'))) AS
INCOME_STATUS

FROM CUSTOMER_INCOME_STATUS;
```

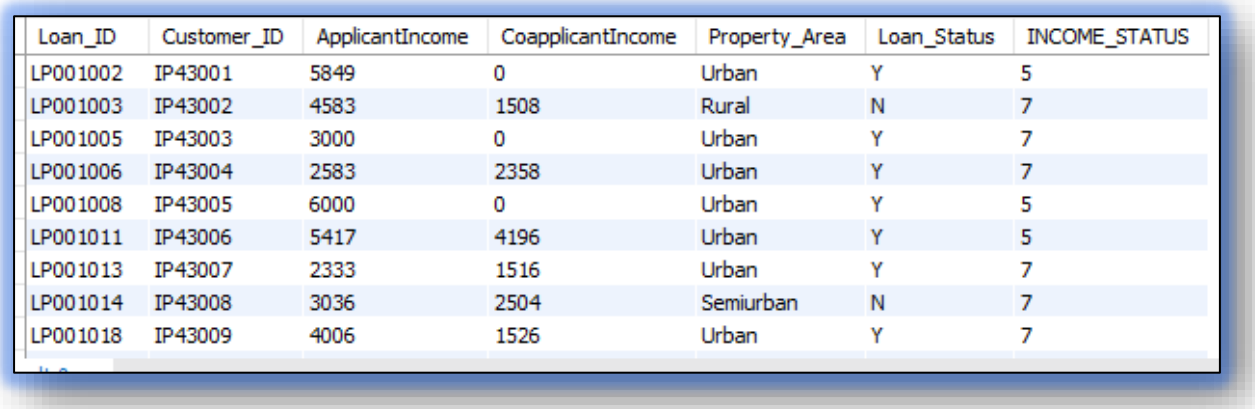
```
select*FROM CUSTOMER_STATUS_INCOME ;
```



Loan_ID	Customer ID	ApplicantIncome	CoapplicantIncome	Property_Area	Loan_Status	CUSTOMER_STATUS_GRADE	CUSTOMER_MONTHLY_INTERSET
LP001002	IP43001	5849	0	Urban	Y	MIDDLE CLASS CUSTOMER	5.0
LP001003	IP43002	4583	1508	Rural	N	LOW CLASS	7.0
LP001005	IP43003	3000	0	Urban	Y	LOW CLASS	7.0
LP001006	IP43004	2583	2358	Urban	Y	LOW CLASS	7.0
LP001008	IP43005	6000	0	Urban	Y	MIDDLE CLASS CUSTOMER	5.0
LP001011	IP43006	5417	4196	Urban	Y	MIDDLE CLASS CUSTOMER	5.0
LP001013	IP43007	2333	1516	Urban	Y	LOW CLASS	7.0
LP001014	IP43008	3036	2504	Semiurban	N	LOW CLASS	7.0

CUSTOMER_STATUS_INCOME 4

```
-- MONTHLY INTEREST RATE
SELECT *,IF(ApplicantIncome>5000 and Property_Area = 'Rural',3,
IF(ApplicantIncome>5000 and Property_Area = 'Semiurban',3.5,
IF(ApplicantIncome>5000 and Property_Area = 'urban',5,
IF(ApplicantIncome>5000 and Property_Area ='Semiurban',2.5,7)))) AS
INCOME_STATUS
FROM CUSTOMER_INCOME_STATUS;
```



Loan_ID	Customer_ID	ApplicantIncome	CoapplicantIncome	Property_Area	Loan_Status	INCOME_STATUS
LP001002	IP43001	5849	0	Urban	Y	5
LP001003	IP43002	4583	1508	Rural	N	7
LP001005	IP43003	3000	0	Urban	Y	7
LP001006	IP43004	2583	2358	Urban	Y	7
LP001008	IP43005	6000	0	Urban	Y	5
LP001011	IP43006	5417	4196	Urban	Y	5
LP001013	IP43007	2333	1516	Urban	Y	7
LP001014	IP43008	3036	2504	Semiurban	N	7
LP001018	IP43009	4006	1526	Urban	Y	7

Criteria

Monthly interest percentage

- Applicant income <5000 rural=3%
- Applicant income <5000 semi rural=3.5%
- Applicant income <5000 urban=5%
- Applicant income <5000 semi urban= 2.5%
- Otherwise =7%

-- NEW FIELD CREATION BASED ON INTEREST

```
CREATE TABLE CUSTOMER_STATUS_INCOME AS SELECT
*,IF(ApplicantIncome>15000,'GRADE A',
IF(ApplicantIncome>9000,'GRADE B',
IF(ApplicantIncome>5000,'MIDDLE CLASS CUSTOMER','LOW CLASS'))) AS
CUSTOMER_STATUS_GRADE,
IF(ApplicantIncome>5000 and Property_Area = 'Rural',3,
IF(ApplicantIncome>5000 and Property_Area = 'Semiurban',3.5,
IF(ApplicantIncome>5000 and Property_Area = 'urban',5,
IF(ApplicantIncome>5000 and Property_Area ='Semiurban',2.5,7)))) AS
CUSTOMER_MONTHLY_INTERSET
FROM CUSTOMER_INCOME_STATUS;
```

```
select*FROM CUSTOMER_STATUS_INCOME ;
```

Loan_ID	Customer ID	ApplicantIncome	CoapplicantIncome	Property_Area	Loan_Status	CUSTOMER_STATUS_GRADE	CUSTOMER_MONTHLY_INTERSET
LP001002	IP43001	5849	0	Urban	Y	MIDDLE CLASS CUSTOMER	5.0
LP001003	IP43002	4583	1508	Rural	N	LOW CLASS	7.0
LP001005	IP43003	3000	0	Urban	Y	LOW CLASS	7.0
LP001006	IP43004	2583	2358	Urban	Y	LOW CLASS	7.0
LP001008	IP43005	6000	0	Urban	Y	MIDDLE CLASS CUSTOMER	5.0
LP001011	IP43006	5417	4196	Urban	Y	MIDDLE CLASS CUSTOMER	5.0
LP001013	IP43007	2333	1516	Urban	Y	LOW CLASS	7.0
LP001014	IP43008	3036	2504	Semiurban	N	LOW CLASS	7.0

-- MOYHLY INTEREST RATE

```
SELECT A.*,B.LOAN_AMOUNT,

(A.CUSTOMER_MONTHLY_INTERSET* B.LOAN_AMOUNT)/100 AS
MONTHLY_INTERST_AMOUNT,

round(((A.CUSTOMER_MONTHLY_INTERSET*B.LOAN_AMOUNT)/100)*12,2)AS
ANNUAL_INTEREST_AMOUNT

FROM CUSTOMER_STATUS_INCOME A JOIN LOAN_CIBIL_SCORE_STATUS B ON A.LOAN_ID
= B.LOAN_ID;
```

-- MONTHLY AND ANNUAL INTEREST RATE AND (CREATE CUSTOMER INTEREST ANALYSIS TABLE)

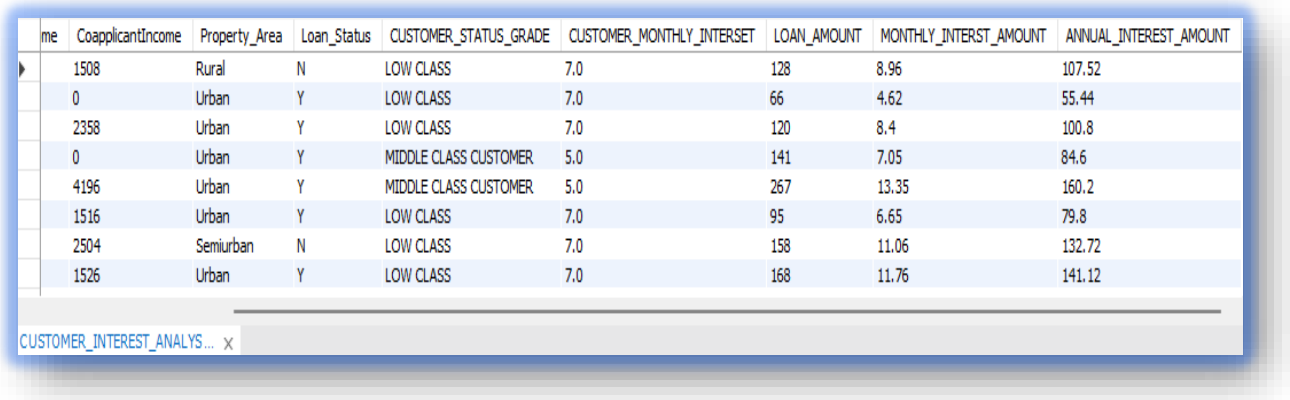
```
CREATE TABLE CUSTOMER_INTEREST_ANALYSIS SELECT A.*,B.LOAN_AMOUNT,

(A.CUSTOMER_MONTHLY_INTERSET* B.LOAN_AMOUNT)/100 AS
MONTHLY_INTERST_AMOUNT,

round(((A.CUSTOMER_MONTHLY_INTERSET*B.LOAN_AMOUNT)/100)*12,2)AS
ANNUAL_INTEREST_AMOUNT

FROM CUSTOMER_STATUS_INCOME A JOIN LOAN_CIBIL_SCORE_STATUS B ON A.LOAN_ID
= B.LOAN_ID;
```

1.4SELECT* FROM CUSTOMER_INTEREST_ANALYSIS;



me	CoapplicantIncome	Property_Area	Loan_Status	CUSTOMER_STATUS_GRADE	CUSTOMER_MONTHLY_INTERSET	LOAN_AMOUNT	MONTHLY_INTERST_AMOUNT	ANNUAL_INTEREST_AMOUNT
	1508	Rural	N	LOW CLASS	7.0	128	8.96	107.52
	0	Urban	Y	LOW CLASS	7.0	66	4.62	55.44
	2358	Urban	Y	LOW CLASS	7.0	120	8.4	100.8
	0	Urban	Y	MIDDLE CLASS CUSTOMER	5.0	141	7.05	84.6
	4196	Urban	Y	MIDDLE CLASS CUSTOMER	5.0	267	13.35	160.2
	1516	Urban	Y	LOW CLASS	7.0	95	6.65	79.8
	2504	Semiurban	N	LOW CLASS	7.0	158	11.06	132.72
	1526	Urban	Y	LOW CLASS	7.0	168	11.76	141.12

CUSTOMER_INTEREST_ANALYS... x

customer info

SHEET :3

3.1*Import the table

3.2Update gender and age based on customer id

```
SELECT*FROM CUSOTOMER_INFO;

UPDATE CUSOTOMER_INFO SET Gender = 'Female' where customer_id ='IP43006';

UPDATE CUSOTOMER_INFO SET Gender = 'Female' where customer_id ='IP43016';

UPDATE CUSOTOMER_INFO SET Gender = 'male' where customer_id ='IP43018';

UPDATE CUSOTOMER_INFO SET Gender = 'male' where customer_id ='IP43038';

UPDATE CUSOTOMER_INFO SET Gender = 'Female' where customer_id ='IP43508';

UPDATE CUSOTOMER_INFO SET Gender = 'Female' where customer_id ='IP43577';
```

```
UPDATE CUSOTOMER_INFO SET Gender = 'Female' where customer_id ='IP43589';

UPDATE CUSOTOMER_INFO SET Gender = 'Female' where customer_id ='IP43593';

UPDATE CUSOTOMER_INFO SET age = 45  where customer_id ='IP43007';

UPDATE CUSOTOMER_INFO SET age = 32 where customer_id ='IP43009';
```

country state and region

Sheet 4 and 5

4.1 Import the table

```
SELECT* FROM country_state;

SELECT * FROM region_info;
```

4.2-- task .1all the 5 table without repeating the fields

```
SELECT LOAN_AMOUNT_TERM,B.CIBIL_SCORE,B.CIBIL_SCORE_STATUS,

C.CUSTOMER_NAME,C.GENDER,C.AGE,C.MARRIED,C.EDUCATION,C.SELF_EMPLOYED,A.*,C.R
EGION_ID,

D.POSTAL_CODE,D.SEGMENT,D.STATE,E.REGION

FROM customer_interest_analysis A

JOIN loan_cibil_score_status B on A.customer_id = B.customer_id

JOIN cusotomer_info C on A.customer_id = C.customer_id

JOIN country_state D on A.customer_id = D.customer_id

join region_info E on C.region_id = E.region_id;
```

LOAN_AMOUNT_TERM	CIBIL_SCORE	CIBIL_SCORE_STATUS	CUSTOMER_NAME	GENDER	AGE	MARRIED	EDUCATION	SELF_EMPLOYED	Loan_ID	Customer_ID	ApplicantIncome
360	920	HIGH CIBIL SCORE	Darrin Van Huff	Male	66	Yes	Graduate	No	LP001003	IP43002	4583
360	606	PENALTY CUSTOMERS	Sean O'Donnell	Male	20	Yes	Graduate	Yes	LP001005	IP43003	3000
360	851	NO PENALTY	Brosina Hoffman	Male	46	Yes	Not Graduate	No	LP001006	IP43004	2583
360	420	PENALTY CUSTOMERS	Andrew Allen	Male	18	No	Graduate	No	LP001008	IP43005	6000
360	173	REJECT CUSTOMER	Irene Maddox	Female	66	Yes	Graduate	Yes	LP001011	IP43006	5417
360	650	PENALTY CUSTOMERS	Harold Pawlan	Male	45	Yes	Not Graduate	No	LP001013	IP43007	2333
360	471	PENALTY CUSTOMERS	Pete Kriz	Male	41	Yes	Graduate	No	LP001014	IP43008	3036
360	863	NO PENALTY	Alejandro Grove	Male	32	Yes	Graduate	No	LP001018	IP43009	4006

ApplicantIncome	CoapplicantIncome	Property_Area	Loan_Status	CUSTOMER_STATUS_GRADE	CUSTOMER_MONTHLY_INTERSET	LOAN_AMOUNT	MONTHLY_INTERST_AMOUNT	ANNUAL_INTERI
4583	1508	Rural	N	LOW CLASS	7.0	128	8.96	107.52
3000	0	Urban	Y	LOW CLASS	7.0	66	4.62	55.44
2583	2358	Urban	Y	LOW CLASS	7.0	120	8.4	100.8
6000	0	Urban	Y	MIDDLE CLASS CUSTOMER	5.0	141	7.05	84.6
5417	4196	Urban	Y	MIDDLE CLASS CUSTOMER	5.0	267	13.35	160.2
2333	1516	Urban	Y	LOW CLASS	7.0	95	6.65	79.8
3036	2504	Semiurban	N	LOW CLASS	7.0	158	11.06	132.72
4006	1526	Urban	Y	LOW CLASS	7.0	168	11.76	141.12

ANNUAL_INTEREST_AMOUNT	REGION_ID	POSTAL_CODE	SEGMENT	STATE	REGIO
107.52	13.2	90036	Corporate	California	West
55.44	13.2	33311	Consumer	Florida	West
100.8	13.2	90032	Consumer	California	West
84.6	13.2	28027	Consumer	North Carolina	West
160.2	13.2	98103	Consumer	Washington	West
79.8	13.3	76106	Home Office	Texas	North
132.72	13.3	53711	Consumer	Wisconsin	North
141.12	13.2	84084	Consumer	Utah	West

4.3 EXERCISE OUT PUT

-- TASK 2 FIND THE MISMATCH DETAIL USING JOINS

```
SELECT * FROM COUNTRY_STATE A JOIN REGION_INFO B ON A.REGION_ID = B.REGION_ID;
```

Customer_id	Load_Id	Customer_name	Region_id	Postal_Code	Segment	State	Region	Region_Id
IP43001	LP001002	Claire Gute	13.2	42420	Consumer	Kentucky	West	13.2
IP43002	LP001003	Darrin Van Huff	13.2	90036	Corporate	California	West	13.2
IP43003	LP001005	Sean O'Donnell	13.2	33311	Consumer	Florida	West	13.2
IP43004	LP001006	Brosina Hoffman	13.2	90032	Consumer	California	West	13.2
IP43005	LP001008	Andrew Allen	13.2	28027	Consumer	North Carolina	West	13.2
IP43006	LP001011	Irene Maddox	13.2	98103	Consumer	Washington	West	13.2
IP43007	LP001013	Harold Pawlan	13.3	76106	Home Office	Texas	North	13.3
IP43008	LP001014	Pete Kriz	13.3	53711	Consumer	Wisconsin	North	13.3
IP43009	LP001018	Alejandro Grove	13.2	84084	Consumer	Utah	West	13.2

-- TASK 3 FILTER HIGH CIBIL SCORE

```
SELECT LOAN_AMOUNT_TERM,B.CIBIL_SCORE,B.CIBIL_SCORE_STATUS,

C.CUSTOMER_NAME,C.GENDER,C.AGE,C.MARRIED,C.EDUCATION,C.SELF_EMPLOYED,A.*,C.R
EGION_ID,

D.POSTAL_CODE,D.SEGMENT,D.STATE,E.REGION
```

```
FROM customer_interest_analysis A
JOIN loan_cibil_score_status B on A.customer_id = B.customer_id
JOIN cusotomer_info C on A.customer_id = C.customer_id
JOIN country_state D on A.customer_id = D.customer_id
join region_info E on C.region_id = E.region_id
WHERE CIBIL_SCORE_STATUS ='HIGH CIBIL SCORE';
```

LOAN_AMOUNT_TERM	CIBIL_SCORE	CIBIL_SCORE_STATUS	CUSTOMER_NAME	GEND
360	920	HIGH CIBIL SCORE	Darrin Van Huff	Male
360	928	HIGH CIBIL SCORE	Emily Burns	Male
360	903	HIGH CIBIL SCORE	Odella Nelson	Male
360	999	HIGH CIBIL SCORE	Ted Butterfield	Male
360	972	HIGH CIBIL SCORE	Karen Daniels	Male
360	949	HIGH CIBIL SCORE	Troy Staebel	Male

```
-- TASK 4 FILTER HOME OFFICE AND CORPORATE
SELECT LOAN_AMOUNT_TERM,B.CIBIL_SCORE,B.CIBIL_SCORE_STATUS,
C.CUSTOMER_NAME,C.GENDER,C.AGE,C.MARRIED,C.EDUCATION,C.SELF_EMPLOYED,A.*,C.REGION_ID,
D.POSTAL_CODE,D.SEGMENT,D.STATE,E.REGION
FROM customer_interest_analysis A
JOIN loan_cibil_score_status B on A.customer_id = B.customer_id
JOIN cusotomer_info C on A.customer_id = C.customer_id
JOIN country_state D on A.customer_id = D.customer_id
join region_info E on C.region_id = E.region_id
WHERE SEGMENT IN ('HOME OFFICE','CORPORATE');
```

ANNUAL_INTEREST_AMOUNT	REGION_ID	POSTAL_CODE	SEGMENT	STATE	REGION
.07.52	13.2	90036	Corporate	California	West
'9.8	13.3	76106	Home Office	Texas	North
8.8	13.3	68025	Corporate	Nebraska	North
.05	13.3	77095	Home Office	Texas	North
4	13.3	75080	Corporate	Texas	North
3.84	13.3	77041	Home Office	Texas	North
.11.72	13.3	60540	Corporate	Illinois	North
6.6	13.2	90049	Corporate	California	West