ASSIGNMENT 4

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Topic: LIFE INSURANCE

Problem 1

SCHEMA AND TABLE VIEW

Table 1: Accident

- **Schema:**
  CREATE TABLE Accident(
       date DATE NOT NULL,
       report_id INTEGER PRIMARY KEY AUTOINCREMENT,
       police_report_doc IMAGE NOT NULL,
       damage_cost FLOAT NOT NULL,
       fault BOOLEAN NOT NULL,
       customer_id INTEGER,
       CONSTRAINT fk_customer
       FOREIGN KEY (customer_id)
       REFERENCES Customer(customer_id)
       ON DELETE CASCADE
)
- **View:**

	date	report_id	police_report_doc	damage_cost	fault	customer_id
	Filter	Filter	Filter	Filter	Filter	Filter
1	2015-05-12	1	report_acc_car.jpg	100000.0	0	9
2	2015-05-13	2	report_acc_life.jpg	0.0	1	6
3	2015-05-13	3	report_acc_carind.jpg	0.0	0	3
4	2015-05-14	4	report_acc_med12.jpg	100000.0	0	2
5	2015-05-15	5	report_acc_home10.jpg	500000.0	1	7
6	2015-05-16	6	report_acc_life20.jpg	40000.0	1	5
7	2015-05-16	7	report_acc_car20.jpg	100000.0	0	8
8	2015-05-16	8	report_acc_carfiat.jpg	748000.0	1	9
9	2015-05-16	9	report_acc_homesch.jpg	350000.0	1	8
10	2015-05-16	10	report_acc_medstu.jpg	15000.0	1	5

Table 2: Address

- **Schema:**

```
CREATE TABLE "Address" (
        "state"TEXT NOT NULL,
        "city"  TEXT NOT NULL,
        "pincode"      INTEGER NOT NULL,
        PRIMARY KEY("pincode")
)
```

- **View:**

	state	city	pincode
	Filter	Filter	Filter
1	Rajasthan	Jaipur	320001
2	Madhya Prade...	Indore	452001
3	Madhya Prade...	Bhopal	460001
4	Maharashtra	Pune	530001
5	Maharashtra	Mumbai	540012

Table 3: Agent

- **Schema:**

```
CREATE TABLE Agent (
        "agent_id" INTEGER PRIMARY KEY AUTOINCREMENT,
        "first_name" TEXT NOT NULL,
        "last_name" TEXT NOT NULL,
        "user_name" VARCHAR NOT NULL UNIQUE,
        "date_of_birth" date NOT NULL,
        "aadhar_number" VARCHAR NOT NULL UNIQUE,
        "contact_details" VARCHAR NOT NULL,
        "pincode" INTEGER,
        CONSTRAINT fk_address
        FOREIGN KEY (pincode)
        REFERENCES Address(pincode)
        ON DELETE CASCADE
)
```

- **View:**

	agent_id	first_name	last_name	user_name	date_of_birth	aadhar_number	contact_details	pincode
	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
1	1	Pavan	Kumar	username_01	1967-04-19	24593456	7771244451	452001
2	2	Ramesh	Yadav	username_02	1972-06-24	21457782	8887779994	460001
3	3	Vinay	Gaur	username_03	1978-04-25	21444576	7878454512	540012
4	4	Vanishka	Srivastava	username_04	1999-11-15	24555177	9695472201	530001
5	5	Priya	Tiru	username_05	1998-05-21	10000247	8711245778	320001

Table 4: Customer

- **Schema:**

```
CREATE TABLE Customer(
        customer_id INTEGER PRIMARY KEY AUTOINCREMENT,
        first_name TEXT NOT NULL,
        last_name TEXT NOT NULL,
        aadhar_number VARCHAR UNIQUE NOT NULL,
        date_of_birth DATE NOT NULL,
        driving_license_number VARCHAR NOT NULL,
        contact_details VARCHAR NOT NULL,
        pincode INTEGER,
        agent_id INTEGER,
        policy_number INTEGER,
        CONSTRAINT fk_address
        FOREIGN KEY (pincode)
        REFERENCES Address(pincode)
        ON DELETE CASCADE,
        CONSTRAINT fk_agent
        FOREIGN KEY (agent_id)
        REFERENCES Agent(agent_id)
        ON DELETE CASCADE,
        CONSTRAINT fk_policy
        FOREIGN KEY (policy_number)
        REFERENCES "_old"(policy_number)
        ON DELETE CASCADE
)
```

- **View:**

customer_id	first_name	last_name	aadhar_number	date_of_birth	driving_license_number	contact_details	pincode	agent_id	policy_
Filter	Filter	Filter	Filter	Filter	Filter	Filter	Fil...	Filter	Filter
1	Kapil	Jhade	82961456	1998-08-18	L10001	9456712034	452001	2	4
2	Dheeraj	Chaudhary	85124697	1999-01-05	L30012	9752147632	460001	2	2
3	Ankit	Dimri	78420167	1998-11-21	L12885	7521493015	320001	1	2
4	Somyadeep	Shrivastava	85214678	1998-12-02	L45721	7555812349	460001	4	1
5	Sujeet	Maurya	87210156	1998-07-26	L12221	8852666712	530001	5	5
6	Aditi	Chaurasia	87945123	1975-05-11	L10111	7007894025	452001	1	3

Table 5: Insurance

- **Schema:**

```
CREATE TABLE "Insurance" (
        "insurance_id"      INTEGER NOT NULL PRIMARY KEY
AUTOINCREMENT UNIQUE,
        "insurance_type"    VARCHAR NOT NULL
)
```

- **View:**

insurance_id	insurance_type
Filter	Filter
1	Life Insurance
2	Car Insurance
3	Home Insurance
4	Travel Insura...
5	Medical Insur...

Table 6: Payment

- **Schema:**
  CREATE TABLE Payment(
      transaction_id INTEGER PRIMARY KEY,
      date_of_payment DATE NOT NULL,
      payment_amount FLOAT NOT NULL,
      report_id INTEGER,
      CONSTRAINT fk_accident
      FOREIGN KEY (report_id)
      REFERENCES "_old"(report_id)
      ON DELETE CASCADE
)
- **View:**

	transaction_id	date_of_payment	payment_amount	report_id
	Filter	Filter	Filter	Filter
1	10000001	2019-04-04	12000.0	2
2	10000002	2019-04-05	20000.0	1
3	10000003	2019-04-05	15000.0	5
4	10000004	2019-04-05	156660.0	4
5	10000005	2019-04-06	40000.0	9

Table 7: Policy

- **Schema:**
  CREATE TABLE Policy(
      policy_number INTEGER PRIMARY KEY AUTOINCREMENT,
      issue_date DATE NOT NULL,
      term_cost FLOAT NOT NULL,
      amount_coverage FLOAT NOT NULL,
      policy_type VARCHAR NOT NULL,
      insurance_id INTEGER,

```
                CONSTRAINT fk_insurance
                FOREIGN KEY (insurance_id)
                REFERENCES Insurance(insurance_id)
                ON DELETE CASCADE
        )
```

- **View:**

policy_number	issue_date	term_cost	amount_coverage	policy_type	insurance_id
Filter	Filter	Filter	Filter	Filter	Filter
1	1	01-04-2019	2400.0	100000.0	12 months	2
2	2	01-04-2019	800.0	400000.0	48 months	3
3	3	01-04-2019	399.0	1000000.0	120 months	5
4	4	01-04-2019	800.0	200000.0	30 months	1
5	5	01-04-2019	1200.0	1000000.0	144 months	1

Problem 2

Solution 2.1:

Query:

```
SELECT
        transaction_id, date_of_payment, Accident.customer_id
FROM
        Accident, Payment
WHERE
        Accident.report_id = Payment.report_id
```

View:

transaction_id	date_of_payment	customer_id
Filter	Filter	Filter
1	10000001	2019-04-04	6
2	10000002	2019-04-05	9
3	10000003	2019-04-05	7
4	10000004	2019-04-05	2
5	10000005	2019-04-06	8

Solution 2.2:

Query:

```
SELECT
        first_name || "(" || "testing" || ")" AS newcolumn
```

FROM
    Customer

View:

	newcolumn
	Filter
1	Kapil(testing)
2	Dheeraj(testing)
3	Ankit(testing)
4	Somyadeep(testing)
5	Sujeet(testing)
6	Aditi(testing)