

Problem Set 5

Shun Zhang (sz4554)

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1.

```
CREATE TABLE Label
(
name varchar (255),
id_Label integer,
fk_TripleTable integer,
PRIMARY KEY(id_Label),
FOREIGN KEY(fk_TripleTable) REFERENCES TripleTable (id_TripleTable)
ON DELETE CASCADE
);
```

```
CREATE TABLE Vertex
(
name varchar (255),
id_Vertex integer,
fk_TripleTable1 integer,
fk_TripleTable2 integer,
PRIMARY KEY(id_Vertex),
FOREIGN KEY(fk_TripleTable1) REFERENCES TripleTable (id_TripleTable)
ON DELETE CASCADE,
FOREIGN KEY(fk_TripleTable2) REFERENCES TripleTable (id_TripleTable)
ON DELETE CASCADE
);
```

```
CREATE TABLE TripleTable
(
```

```

id_TripleTable integer,
PRIMARY KEY(id_TripleTable)
);

```

2. The operation of $f(x1, x2)=x3$ is integrated as $(x1, f, x3)$ and $(x2, f, x3)$ in the diagram, where $x1, x2, x3$ are all in the **RelationSchema**, and the relation of tuple is described by **Operation**. The operator, f , is stored in **Operator**.

