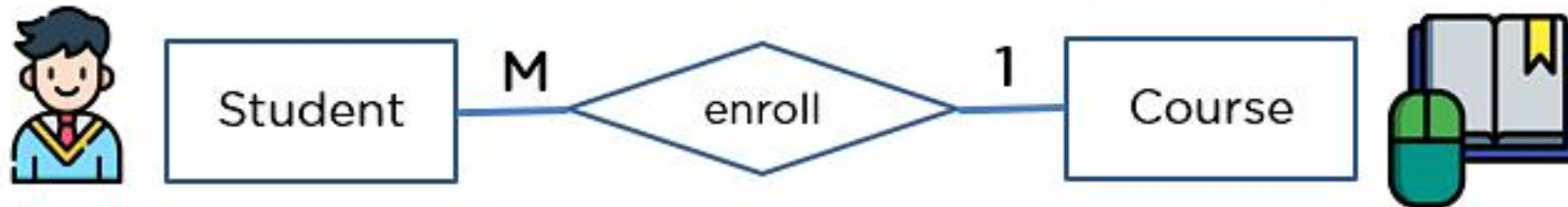
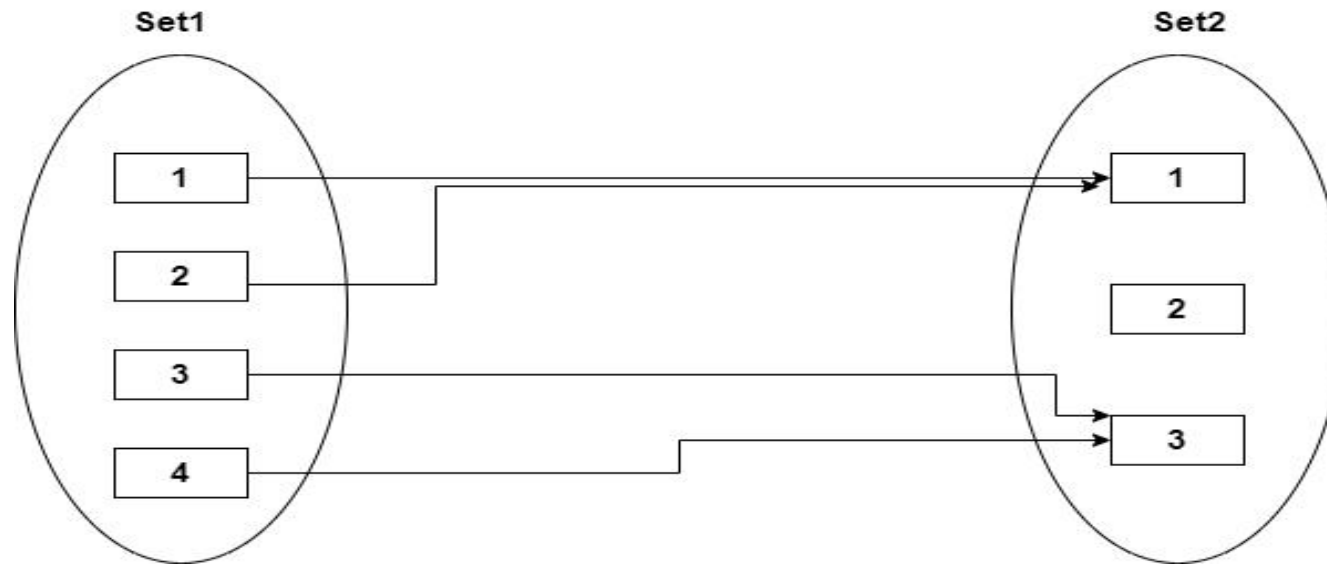


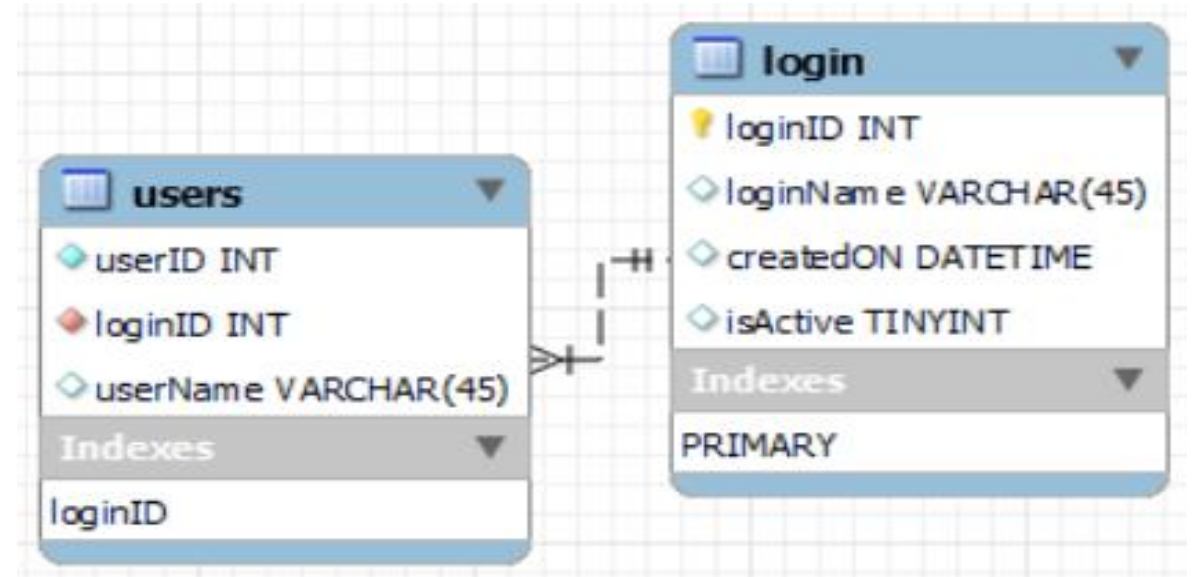
many-to-one relationship



many-to-one relationship

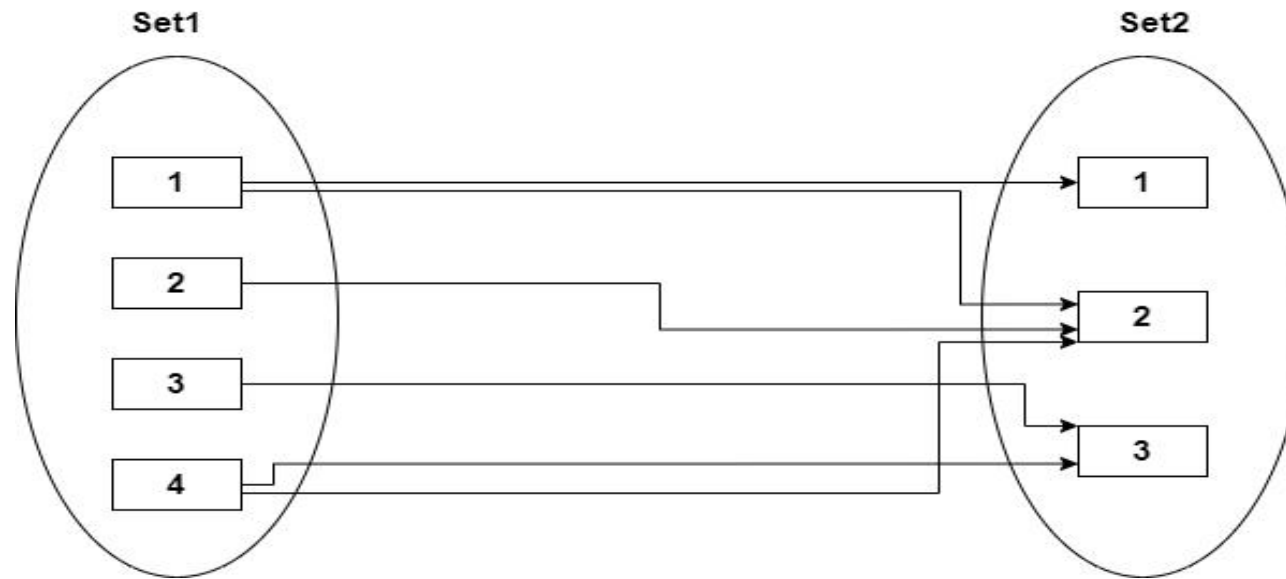
```
CREATE TABLE users (  
  userID INT,  
  loginID INT,  
  userName VARCHAR(45),  
  PRIMARY KEY(loginID, userID),  
  constraint fk_users_login_loginID1 FOREIGN  
  KEY(loginID)  
  REFERENCES login(loginID)  
);
```

```
CREATE TABLE users (  
  userID INT NOT NULL,  
  loginID INT NOT NULL,  
  userName VARCHAR(45),  
  UNIQUE(loginID, userID),  
  constraint fk_users_login_loginID2 FOREIGN  
  KEY(loginID)  
  REFERENCES login(loginID)  
);
```



```
CREATE TABLE login (  
  loginID INT,  
  loginName VARCHAR(45),  
  createdON DATETIME,  
  isActive TINYINT,  
  PRIMARY KEY(loginID)  
);
```

many-to-many relationship



Employee

M

is assigned

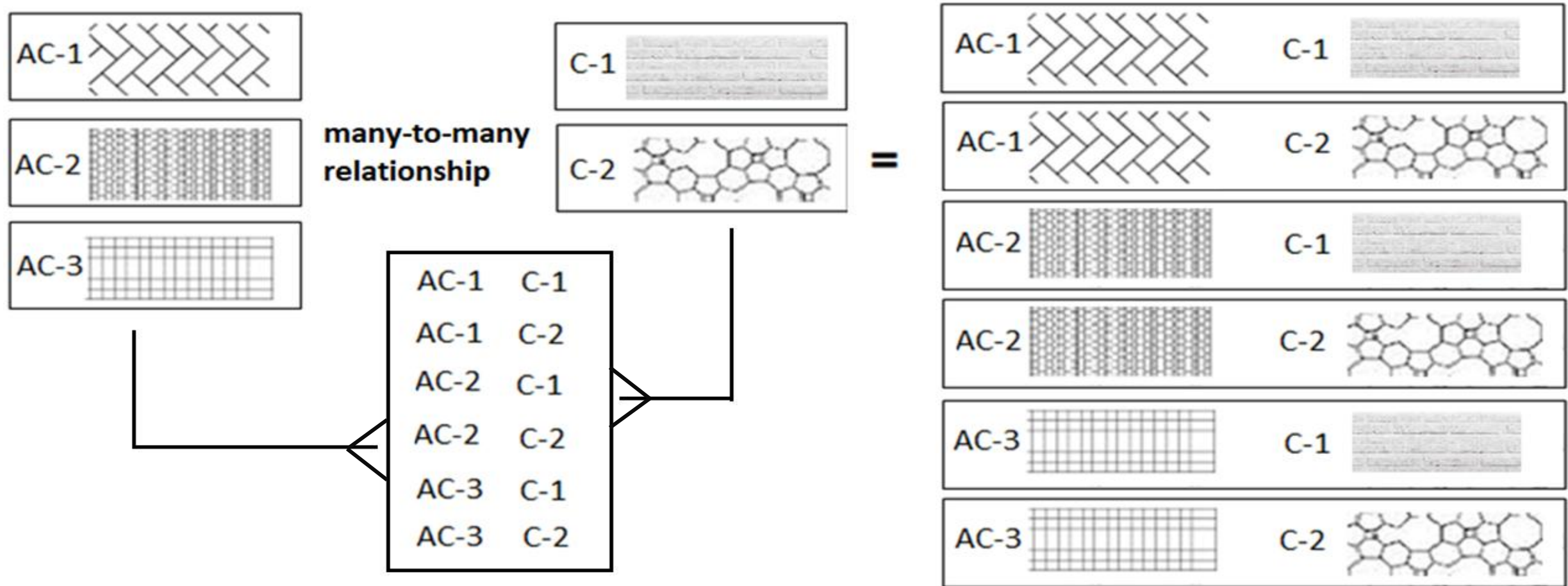
M

Project



many-to-many relationship

A *many-to-many* relationship is a type of cardinality that refers to the relationship between two entities R and S in which R may contain a parent instance for which there are many children in S and vice versa.



how to create many-to-many relationship

```
CREATE TABLE item (  
  ID INT PRIMARY KEY,  
  name VARCHAR(45),  
  description TEXT  
);
```

```
CREATE TABLE orders (  
  ID INT PRIMARY KEY,  
  orderdate DATETIME,  
  custID INT NOT NULL,  
  shipDate DATETIME,  
  total FLOAT(8,2),  
  constraint total_greater_zero CHECK(total >= 0)  
);
```

```
CREATE TABLE orders_has_item (  
  orders_ID INT NOT NULL,  
  item_ID INT NOT NULL,  
  PRIMARY KEY(orders_ID, item_ID),  
  constraint fk_orders_has_item_orders FOREIGN  
  KEY(orders_ID)  
  REFERENCES orders(ID),  
  constraint fk_orders_has_item_item1 FOREIGN KEY(item_ID)  
  REFERENCES item(ID)  
);
```

