

I Mo Danthuluru declare that I have completed this assignment completely and entirely on my own, without any consultation with others. I understand that any breach of the UAB Academic Honor Code may result in severe penalties.

Exercise 2.2.1: In Fig. 2.6 are instances of two relations that might constitute part of a banking database. Indicate the following:

<i>acctNo</i>	<i>type</i>	<i>balance</i>
12345	savings	12000
23456	checking	1000
34567	savings	25

The relation **Accounts**

<i>firstName</i>	<i>lastName</i>	<i>idNo</i>	<i>account</i>
Robbie	Banks	901-222	12345
Lena	Hand	805-333	12345
Lena	Hand	805-333	23456

The relation **Customers**

a) The attributes of each relation.

The attributes of Accounts relation

1. acctNo
2. type
3. balance

The attributes of Customers relation

- firstName
- lastName
- idNo
- accounts

b) The tuples of each relation.

- Tuple for Accounts Relation

1. Tuple 1 – (12345, savings, 12000)
2. Tuple 2 – (23456, checking, 1000)
3. Tuple 3 – (34567, savings, 25)

- Tuple For Customers Relation

1. Tuple 1 – (Robbie, Banks, 901-222, 12345)
2. Tuple 2 – (Lena, Hand, 805-333, 12345)
3. Tuple 3 – (Lena, Hand, 805-333, 23456)

d) The relation schema for each relation.

- Relation schema for Accounts relation

Accounts(acctNo, type, balance)

- Relation Schema for Customers relation

Customers(firstName, lastName, idNo, account)

e) The database schema.

- Accounts(acctNo, type, balance)

- Customers(firstName, lastName, idNo, account)

f) A suitable domain for each attribute.

- Suitable domain for each attribute in Accounts relation

1. acctNo – integer
2. type – string
3. balance – integer

- Suitable domain for each attribute in Customers relation

1. firstName – string
2. lastName – string
3. idNo – varchar
4. account - integer