PDA (Personal Database Application) schema and basic commands

(A) EStore schema

E_store (**storeName**, webAddress, address)
Hosts (**storeName, IID)**
Employs (**storeName, eID,** startDate, endDate)
Pays (**payID**, **storeName, sID,** paydate, amount)
CollectsFrom (**storeName, bID, date)**
Buyer (**bID**, bname, bpassword, loyaltyNO, baddress, bemail)
Buy (**bID**, **IID,** buydate)
Seller (**sID**, password, sname, saddress, semail)
Post (**sID, IID,** pdate)
Employee (**eID**, ename, DOB, dependents, salary)
WorksIn (**eID, dID)**
Department (**dID**, dname)
Item (**IID**, itemName, price, category, quantity)

(B) Commands

show databases;

create database EStore;

show databases;

use EStore;

show tables;

create table E_store (
storeName varchar(20) NOT NULL,
webAddress varchar(40),
address varchar(40),
PRIMARY KEY (storeName)
);

create table Hosts (
storeName varchar(20) NOT NULL,
IID int NOT NULL,
PRIMARY KEY (storeName, IID)
);

```sql
create table Employs (
storeName varchar(20) NOT NULL,
eID int NOT NULL,
startDate date,
endDate date,
PRIMARY KEY (storeName, eID)
);

create table Pays (
payID int NOT NULL,
storeName varchar(20) NOT NULL,
sID int NOT NULL,
payday date,
amount decimal(5,2),
PRIMARY KEY (storeName, payID, sID)
);

create table CollectsFrom (
storeName varchar(20) NOT NULL,
bID int NOT NULL,
date date,
PRIMARY KEY (storeName, bID, date)
);

create table Buyer (
bID int NOT NULL,
bname varchar (20) NOT NULL,
bpassword varchar(20),
loyaltyNO int,
baddress varchar(40),
email varchar(30),
PRIMARY KEY (bID)
);

create table Buy (
bID int NOT NULL,
IID int NOT NULL,
buydate date,
PRIMARY KEY (bID, IID)
);

create table Seller (
sID int NOT NULL,
password varchar(20),
sname varchar (20) NOT NULL,
```

```sql
saddress varchar (40),
semail varchar (30),
PRIMARY KEY (sID)
);

create table Post (
sID int NOT NULL,
IID int NOT NULL,
pdate date,
PRIMARY KEY (sID, IID)
);

create table Employee (
eID int NOT NULL,
ename varchar(20),
DOB date,
dependents int,
salary decimal(8,2),
PRIMARY KEY (eID)
);

create table WorksIn (
eID int NOT NULL,
dID int NOT NULL,
PRIMARY KEY (eID, dID)
);

create table Department (
dID int NOT NULL,
dname varchar(20),
PRIMARY KEY (dID)
);

create table Item (
IID int NOT NULL,
itemName varchar(80),
price decimal (5,2),
category varchar(20),
quantity int,
PRIMARY KEY (IID)
);

show tables;

describe E_store;
```

describe Hosts;

describe Employs;

describe Pays;

describe CollectsFrom;

describe Buyer;

describe Buy;

describe Seller;

describe Post;

describe Employee;

describe WorksIn;

describe Department;

describe Item;

insert into Item (IID, itemName, price, category, quantity) values
(89000000, 'pink sweater', 29.99, 'sweaters', 1),
(89000001, 'yellow sweater', 19.99, 'sweaters', 2),
(89000002, 'blue sweater', 39.99, 'sweaters', 1);

insert into Buy values (100001, 89000001, '2023-10-06');

insert into Buyer values (100001, 'Mary Jane', 'janemary1', 200000001, '345 Creek st, San
Diego, CA, 92117', 'maryjane1000@gmail.com');

select * from Item;

select * from Buy;

select * from Buyer;

(C)   Mysql output

```
mysql> source /Users/katrin/Documents/Kool/DU/DatabaseMgmt_3421/Katrin_JogiA3.sql;
```

```
+--------------------+
| Database           |
+--------------------+
| Async32            |
| foo                |
| information_schema |
| mysql              |
| performance_schema |
| sys                |
| test               |
| test9              |
+--------------------+
8 rows in set (0.00 sec)

Query OK, 1 row affected (0.01 sec)

+--------------------+
| Database           |
+--------------------+
| Async32            |
| EStore             |
| foo                |
| information_schema |
| mysql              |
| performance_schema |
| sys                |
| test               |
| test9              |
+--------------------+
9 rows in set (0.00 sec)

Database changed
Empty set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.00 sec)

+------------------+
| Tables_in_estore |
+------------------+
| Buy              |
| Buyer            |
| CollectsFrom     |
| Department       |
| E_store          |
| Employee         |
```

```
| Employs          |
| Hosts            |
| Item             |
| Pays             |
| Post             |
| Seller           |
| WorksIn          |
+------------------+
13 rows in set (0.00 sec)
```

Field	Type	Null	Key	Default	Extra
storeName	varchar(20)	NO	PRI	NULL	
webAddress	varchar(40)	YES		NULL	
address	varchar(40)	YES		NULL	

```
3 rows in set (0.00 sec)
```

Field	Type	Null	Key	Default	Extra
storeName	varchar(20)	NO	PRI	NULL	
IID	int	NO	PRI	NULL	

```
2 rows in set (0.00 sec)
```

Field	Type	Null	Key	Default	Extra
storeName	varchar(20)	NO	PRI	NULL	
eID	int	NO	PRI	NULL	
startDate	date	YES		NULL	
endDate	date	YES		NULL	

```
4 rows in set (0.00 sec)
```

Field	Type	Null	Key	Default	Extra
payID	int	NO	PRI	NULL	
storeName	varchar(20)	NO	PRI	NULL	
sID	int	NO	PRI	NULL	
payday	date	YES		NULL	
amount	decimal(5,2)	YES		NULL	

```
5 rows in set (0.00 sec)
```

Field	Type	Null	Key	Default	Extra
storeName	varchar(20)	NO	PRI	NULL	
bID	int	NO	PRI	NULL	
date	date	NO	PRI	NULL	

```
3 rows in set (0.00 sec)
```

Field	Type	Null	Key	Default	Extra
bID	int	NO	PRI	NULL	
bname	varchar(20)	NO		NULL	
bpassword	varchar(20)	YES		NULL	
loyaltyNO	int	YES		NULL	
baddress	varchar(40)	YES		NULL	
email	varchar(30)	YES		NULL	

```
6 rows in set (0.00 sec)
```

```
+---------+------+------+-----+---------+-------+
| Field   | Type | Null | Key | Default | Extra |
+---------+------+------+-----+---------+-------+
| bID     | int  | NO   | PRI | NULL    |       |
| IID     | int  | NO   | PRI | NULL    |       |
| buydate | date | YES  |     | NULL    |       |
+---------+------+------+-----+---------+-------+
3 rows in set (0.00 sec)

+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| sID      | int         | NO   | PRI | NULL    |       |
| password | varchar(20) | YES  |     | NULL    |       |
| sname    | varchar(20) | NO   |     | NULL    |       |
| saddress | varchar(40) | YES  |     | NULL    |       |
| semail   | varchar(30) | YES  |     | NULL    |       |
+----------+-------------+------+-----+---------+-------+
5 rows in set (0.00 sec)

+-------+------+------+-----+---------+-------+
| Field | Type | Null | Key | Default | Extra |
+-------+------+------+-----+---------+-------+
| sID   | int  | NO   | PRI | NULL    |       |
| IID   | int  | NO   | PRI | NULL    |       |
| pdate | date | YES  |     | NULL    |       |
+-------+------+------+-----+---------+-------+
3 rows in set (0.00 sec)

+------------+--------------+------+-----+---------+-------+
| Field      | Type         | Null | Key | Default | Extra |
+------------+--------------+------+-----+---------+-------+
| eID        | int          | NO   | PRI | NULL    |       |
| ename      | varchar(20)  | YES  |     | NULL    |       |
| DOB        | date         | YES  |     | NULL    |       |
| dependents | int          | YES  |     | NULL    |       |
| salary     | decimal(8,2) | YES  |     | NULL    |       |
+------------+--------------+------+-----+---------+-------+
5 rows in set (0.00 sec)

+-------+------+------+-----+---------+-------+
| Field | Type | Null | Key | Default | Extra |
+-------+------+------+-----+---------+-------+
| eID   | int  | NO   | PRI | NULL    |       |
| dID   | int  | NO   | PRI | NULL    |       |
+-------+------+------+-----+---------+-------+
2 rows in set (0.01 sec)

+-------+-------------+------+-----+---------+-------+
| Field | Type        | Null | Key | Default | Extra |
+-------+-------------+------+-----+---------+-------+
| dID   | int         | NO   | PRI | NULL    |       |
| dname | varchar(20) | YES  |     | NULL    |       |
+-------+-------------+------+-----+---------+-------+
2 rows in set (0.00 sec)

+----------+--------------+------+-----+---------+-------+
| Field    | Type         | Null | Key | Default | Extra |
+----------+--------------+------+-----+---------+-------+
| IID      | int          | NO   | PRI | NULL    |       |
| itemName | varchar(80)  | YES  |     | NULL    |       |
| price    | decimal(5,2) | YES  |     | NULL    |       |
| category | varchar(20)  | YES  |     | NULL    |       |
| quantity | int          | YES  |     | NULL    |       |
+----------+--------------+------+-----+---------+-------+
5 rows in set (0.00 sec)

Query OK, 3 rows affected (0.00 sec)
Records: 3  Duplicates: 0  Warnings: 0
```

```
Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

+----------+---------------+-------+----------+----------+
| IID      | itemName      | price | category | quantity |
+----------+---------------+-------+----------+----------+
| 89000000 | pink sweater  | 29.99 | sweaters |        1 |
| 89000001 | yellow sweater| 19.99 | sweaters |        2 |
| 89000002 | blue sweater  | 39.99 | sweaters |        1 |
+----------+---------------+-------+----------+----------+
3 rows in set (0.00 sec)

+--------+----------+------------+
| bID    | IID      | buydate    |
+--------+----------+------------+
| 100001 | 89000001 | 2023-10-06 |
+--------+----------+------------+
1 row in set (0.00 sec)

+--------+-----------+-----------+-----------+--------------------------------------+--------------------------+
| bID    | bname     | bpassword | loyaltyNO | baddress                             | email                    |
+--------+-----------+-----------+-----------+--------------------------------------+--------------------------+
| 100001 | Mary Jane | janemary1 | 200000001 | 345 Creek st, San Diego, CA, 92117   | maryjane1000@gmail.com   |
+--------+-----------+-----------+-----------+--------------------------------------+--------------------------+
1 row in set (0.00 sec)

mysql> show tables;
```

IDs
1. dID 3 char
2. eID 4 char
3. sID 5 char
4. bID 6 char
5. payID – 7 char
6. IID   8 char
7. Loyalty   9