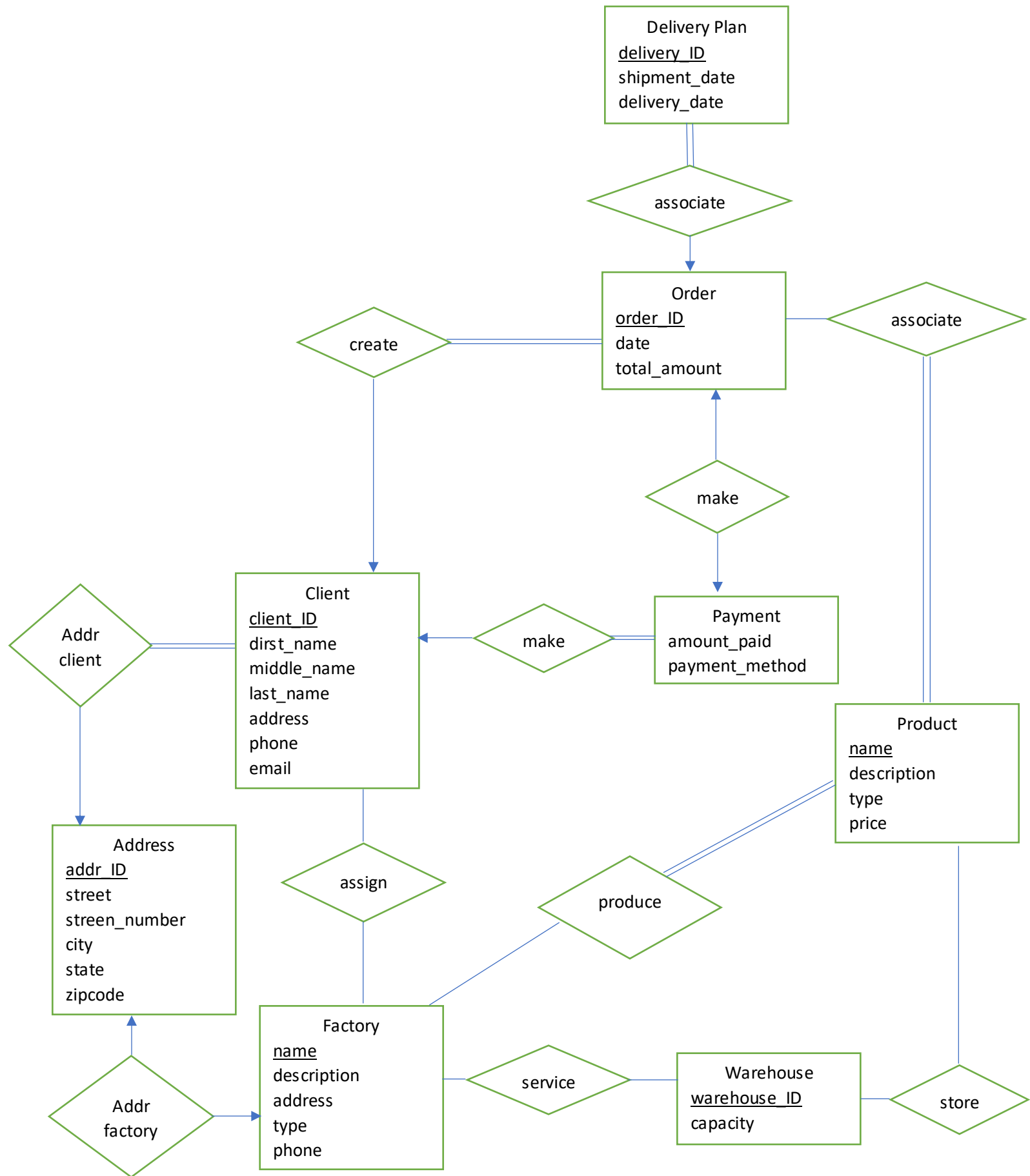


# Homework 3

## Q 3.1.1



### Q 3.2.1

#### Step 1:

```
Create table A (  
  a2 int,  
  a3 int,  
  a11 int,  
  a12 int,  
  primary key (a11, a12)  
)
```

```
Create table B (  
  b1 int,  
  b2 int,  
  primary key (b1, b2)  
)
```

```
Create table C (  
  c2 int primary key,  
  c11 int,  
  c12 int  
)
```

```
Create table E (  
  e1 int primary key,  
  e2 int  
)
```

#### Step2:

```
Create table A (  
  a2 int,  
  a3 int,  
  a11 int,  
  a12 int,  
  primary key (a11, a12)  
)
```

```
Create table B (  
  b1 int,  
  b2 int,  
  primary key (b1, b2)  
)
```

```
Create table C (  
  c2 int primary key,  
  c11 int,  
  c12 int  
)
```

```
Create table D (  
  d1 int,  
  a1 int references A,  
  primary key (d1, a1)  
)
```

```
Create table E (  
  e1 int primary key,  
  e2 int  
)
```

### Step 3:

```
Create table A (  
  a2 int,  
  a3 int,  
  a11 int,  
  a12 int,  
  primary key (a11, a12)  
)
```

```
Create table B (  
  b1 int,  
  b2 int,  
  primary key (b1, b2)  
)
```

```
Create table B2 (  
  b1 int,  
  b2 int,  
  b3 int,  
  primary key (b1, b2, b3),  
  foreign key (b1, b2) references B  
)
```

```
Create table C (  
  c2 int primary key,  
  c11 int,  
  c12 int  
)
```

```
Create table D (  
  d1 int,  
  a1 int references A,  
  primary key (d1, a1)  
)
```

```
Create table E (  
  e1 int primary key,  
  e2 int  
)
```

#### Step 4:

```
Create table A (  
  a2 int,  
  a3 int,  
  a11 int,  
  a12 int,  
  primary key (a11, a12)  
)
```

```
Create table B (  
  b1 int,  
  b2 int,  
  a11 int,  
  a12 int,  
  primary key (b1, b2),  
  foreign key (a11, a12) references A  
)
```

```
Create table B2 (  
  b1 int,  
  b2 int,  
  b3 int,  
  primary key (b1, b2, b3),  
  foreign key (b1, b2) references B  
)
```

```
Create table C (  
  c2 int primary key,  
  c11 int,  
  c12 int  
)
```

```
Create table D (  
  d1 int,  
  a1 int references A,  
  primary key (d1, a1)  
)
```

```
Create table E (  
e1 int primary key,  
e2 int  
)
```

```
Create table Z (  
c2 int,  
b1 int,  
b2 int,  
e1 int,  
z1 int,  
primary key (b1, b2, c2, e1),  
foreign key (e1) references E,  
foreign key (c2) references C,  
foreign key (b1, b2) references B,  
)
```

### Q 3.2.2

1. 1NF, 2NF
2. 1NF, 2NF
3. 1NF, 2NF
4. 1NF, 2NF, 3NF, BCNF