

**Delivery-Order**

<u>Worker_SSN</u>	<u>Order_ID</u>	Order_Pickup_TS	Order_Deliver_TS
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**Delivery-mealkit**

<u>Mealkit_id</u>	<u>Worker_SSN</u>
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**Warehouse-Delivery Vehicle**

<u>Vehicle_ID</u>	<u>Warehouse_ID</u>	Dist_Covrd_per_order
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**Delivery-Worker**

<u>Worker_SSN</u>	Warehouse_ID	License_no	Vehicle_ID	DOB
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**Warehouse-Worker**

<u>Worker_SSN</u>	Warehouse_ID	Worker_department
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**Warehouse**

<u>Warehouse_ID</u>	Warehouse_location	Warehouse_zipcode
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**Meal-Kit**

<u>Mealkit_ID</u>	Vendor_ID	Warehouse_ID	Cuisine_Type	Meal_Kit_Desc
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**Vendor**

<u>Verdor_ID</u>	Vendor_location
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**Vendor-warehouse**

<u>Vendor_ID</u>	<u>Warehouse_ID</u>
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**Orders**

Order_timestamp	Order_id	<u>Mealkit_id</u>	<u>Customer_id</u>
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**Customer**

<u>Customer_ID</u>	Name	DOB	Gender	Email	Address	Occupation	Subscription_ID
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**Customer-Phone no**

<u>Customer_ID</u>	<u>Phone No.</u>
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**Customer-order**

<u>Customer_ID</u>	<u>Order_ID</u>
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**Subscription**

<u>Subscription_id</u>	Customer_ID	Subscription start_Date	Subscription end_Date
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**Subscription-mealkit**

<u>Subscription_ID</u>	<u>Mealkit_ID</u>
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**Candidate Keys:**

**Delivery-order:** Order\_ID

**Delivery-mealkit:** Mealkit\_ID

**Warehouse-delivery vehicle:** Vehicle\_ID

**Delivery-worker:** Worker\_SSN, license no, Vehicle\_ID

**Warehouse worker:** Worker\_SSN

**Warehouse:** Warehouse\_ID

**Meal-kit:** Mealkit\_ID

**Vendor:** Vendor\_ID

**Vendor-Warehouse:** Vendor\_ID and Warehouse\_ID together

**Orders:** Mealkit\_ID

**Customer:** Customer\_ID, Email, Subscription\_ID

**Customer-phone no:** Phone no, Customer\_ID and Phone no together

**Customer-order:** Order\_ID

**Subscription:** Subscription\_ID, Customer\_ID

**Subscription-mealkit:** Mealkit\_ID

## **Functional Dependencies:**

### **Delivery-order:**

- Order\_ID  $\rightarrow$  {Worker\_SSN, Order\_Pickup\_TS, Order\_Delivery\_TS}

### **Delivery-mealkit:**

- Mealkit\_ID  $\rightarrow$  {Worker\_SSN}

### **Warehouse-delivery vehicle:**

- Vehicle\_ID  $\rightarrow$  {Warehouse\_ID, Dist\_Covrd\_per\_ord}

### **Delivery-worker:**

- (Worker\_SSN, Licence\_no, Vehicle\_ID)  $\rightarrow$  {Warehouse\_ID, DOB}
- Licence\_No  $\rightarrow$  {DOB}
- Vehicle\_ID  $\rightarrow$  {Warehouse\_ID}
- Worker\_SSN  $\rightarrow$  {Warehouse\_ID, DOB}

### **Warehouse worker:**

- Worker\_SSN  $\rightarrow$  {Warehouse\_ID, Worker\_Department}
- Worker\_SSN  $\rightarrow$  {Worker\_Department}

### **Warehouse:**

- Warehouse\_ID  $\rightarrow$  {Warehouse\_location, Warehouse\_zipcode}
- Warehouse\_location  $\rightarrow$  {Warehouse\_zipcode}

### **Mealkit:**

- Mealkit\_ID  $\rightarrow$  {Vendor\_ID, Warehouse\_ID, Cuisine\_type, Mmealkit\_description}

### **Vendor:**

- Vendor\_ID  $\rightarrow$  {Vendor\_location}

### **Vendor-Warehouse:**

- No dependency

### **Orders:**

- Mealkit\_ID  $\rightarrow$  {Customer\_ID, Order\_ID, Order\_timestamp}
- Order\_ID  $\rightarrow$  Customer\_ID
- Order\_ID  $\rightarrow$  Order\_timestamp

### **Customer:**

- Customer\_ID  $\rightarrow$  {Name, DOB, Gender, Email, Address, Occupation, Subscription\_ID}
- Email  $\rightarrow$  {Name, DOB, Gender, Customer\_ID, Address, Occupation, Subscription\_ID}
- Subscription\_ID  $\rightarrow$  {Name, DOB, Gender, Email, Address, Occupation, Customer\_ID}

### **Customer-phone no:**

- Phone no  $\rightarrow$  {Customer\_ID}

### **Customer-order:**

- Order\_ID  $\rightarrow$  {Customer\_ID}

### **Subscription:**

- Subscription\_ID  $\rightarrow$  {Customer\_ID, Subscription\_startdate, Subscription\_enddate}
- Customer\_ID  $\rightarrow$  {Subscription\_ID, Subscription\_startdate, Subscription\_enddate}

### **Subscription-mealkit:**

- Mealkit\_ID  $\rightarrow$  Subscription\_ID