

# The Angel Warehouse - Homework

## 1. Entity: Bay

- **Attributes:**
  - **Bay Number** (Primary Key) – unique identifier for each bay.
  - **Bay Location** – physical location of the bay in the warehouse.
  - **Height** – height of the bay.
  - **Parking Spot** – indicates if there is a parking spot for a fork lift.
- **Key:**
  - Primary Key: **Bay Number**

## 2. Entity: Bin

- **Attributes:**
  - **Bin Number** (Primary Key) – unique identifier for each bin within a bay (e.g., BayNumber-BinNumber).
  - **Size** – dimensions of the bin.
  - **Bay Number** (Foreign Key) – references the bay the bin belongs to.
  - **Maximum Loaded Weight** – maximum weight the bin can hold.
- **Key:**
  - Primary Key: **Bin Number** (composite with Bay Number)
  - Foreign Key: **Bay Number**

## 3. Entity: Fork Lift

- **Attributes:**
  - **Equipment Number** (Primary Key) – unique identifier for each fork lift.
  - **Max Carrying Weight** – maximum weight the fork lift can carry.
  - **Type** – indicates whether the fork lift is petrol or electric.
  - **Bay Number** (Foreign Key) – references the bay to which the fork lift is allocated.
- **Key:**
  - Primary Key: **Equipment Number**
  - Foreign Key: **Bay Number**

## 4. Entity: Item

- **Attributes:**
  - **Item Number** (Primary Key) – unique identifier for each item.
  - **Date Entered** – date the item was taken into the warehouse.
  - **Weight** – weight of the item.
- **Key:**
  - Primary Key: **Item Number**

## 5. Entity: Bin\_Item (Associative Entity)

- **Attributes:**
  - **Bin Number** (Foreign Key) – references the bin where the item is stored.
  - **Item Number** (Foreign Key) – references the item stored in the bin.
  - **Date Stored** – date the item was put into the bin.
- **Key:**
  - Composite Key: **(Bin Number, Item Number)**
  - Foreign Keys: **Bin Number, Item Number**