

For the scenario below identify the **entities**, their **attributes** and appropriate keys

### The Angel Warehouse

The Angel Warehouse stores items for its parent company. The warehouse **is organised into bays**, which are storage areas, but the items themselves are stored in **bins**. Each bay **contains a number of bins**. Each **bay is identified by a unique bay number and the bay location** and the **height** of the bay are recorded. Each **bin has a different number** within the bay, always starting with bin no. 1, and while some bays have only 5 bins some have over 50. The **size** of each bin is recorded.

Some bays have a parking spot for one **fork lift** to help move items round the warehouse and lift items into bins. Each **fork lift is allocated to a bay**. Each **fork lift has a unique equipment number** and the **maximum carrying weight** of the fork lift needs to be known. Some **fork lifts are petrol driven** while some are electric.

For all bins the **maximum loaded weight** must be known.

When an **item** is taken into the **warehouse it is assigned a unique number** and the **date is recorded as well as the item weight**. Bins can store a number of items and when an item is put in a particular bin this date is also recorded. Items can be moved back and forth between bays and bins to optimise the warehouse storage.

Entity: Bay

Attributes

- Bay\_id = primary key
- Bay\_location
- Bay\_height

Entity: Bin

Attributes

- Bin\_id = primary key
- Bay\_id
- Number\_of\_bin
- Bin\_size
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Entity: fork lift

Attributes

- Equipment\_id = primary key
- Bay\_id
- Maxi\_carry\_weight
- Fork\_lift\_type

Entity: items

Attributes

- Item\_id = primary
- Date\_arrived
- Item\_weight

- Bay\_id
- Bin\_id