

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 number**. 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 **warehouse 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 **bin date** is also recorded. Items can be moved back and forth between bays and bins to optimise the warehouse storage.

#### Bay (entity)

- Bay number (key)
- Num of bins
- Bay location
- Height
- Parking spot (boolean)

#### Bin (entity)

- Bin number (key)
- size

#### Fork lift (entity)

- Equipment number (key)
- Bay number
- Max weight
- Petrol (boolean)

#### Item (entity)

- Item number (key)
- Warehouse date
- Bin date
- weight