

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.

Answer

Entity: Bay

Primary Key: bayNumber

Attributes: location, height, numberOfbins, ParkingSpace

Foreign key: binID, itemNumber

Entity: Bin

Attributes: binSize, max_loadweight, itemInbinDate

Primary Key: binID

Foreign key: itemNumber

Entity: Forklift

Primary Key: equipmentNumber

Attributes: fuelType, maxWeight

Foreign key: bayNumber

Entity: Item

Primary Key: itemNumber

Attributes: itemWeight, item_date