

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.

Warehouse(Entity)

- Unique number (Warehouse ID)(Primary key)
- Date
- Weight
- Bay ID(foreign key)

Bay(Entity)

- Unique bay number (Bay ID)(Primary key)
- The bay location
- Height of the bay
- Bin ID (foreign key)
- Forklift ID(Foreign key)

Forklift (Entity)

- Unique equipment number (Forklift ID)(Primary Key)
- Maximum carrying weight
- Petrol or electric driven

Bin (Entity)

- Different numbers (Bins ID)(Primary Key)
- Size
- Items stored