

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 forklift** to help move items round the warehouse and lift items into bins. **Each forklift** is allocated **to a bay**. Each forklift has a unique **equipment number** and the **maximum carrying weight** of the forklift needs to be known. Some forklifts **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.

#### Bay (attribute)

Bay\_number (integer, primary key) - 001

Amount\_of\_bins (integer) - 32

Height\_of\_bay (float) – 1.5

#### Bin (attribute)

Bin\_number (integer, primary key) - 1

Size\_of\_bin (float) – 12.4

#### Forklift (attribute)

Bay\_number (integer) - 1

Equipment\_number (integer, primary key) - 39084

Max\_carrying\_weight (float) - 50

Fuel\_type (petrol | electric) – electric

#### Item (attribute)

Item\_number (integer, primary key) - 122435690

Date (date) – 30/09/2024

Weight – 0.5kg