- 1. Entity: Bay
- Attributes:
- Bay Number (Primary Key): A unique identifier for each bay.
- Location: The physical location of the bay within the warehouse.
- Height: The height of the bay.
- 2. Entity: Bin
- Attributes:
- Bay\_Number (Foreign Key): The bay number to which the bin belongs.
- Bin\_Number (Primary Key, Composite with Bay\_Number): Unique number of the bin within each bay.
- Size: The size of the bin.
- Max\_Loaded\_Weight: The maximum weight the bin can hold.
- 3. Entity: Fork Lift
- Attributes:
- Equipment\_Number (Primary Key): A unique identifier for each forklift.
- Bay\_Number (Foreign Key): The bay number to which the forklift is allocated.
- Max\_Carrying\_Weight: The maximum carrying weight of the forklift.
- Power\_Type: Type of power used by the forklift
- 4. Entity: Item
- Attributes:
- Item\_Number (Primary Key): A unique identifier for each item.
- Date\_Received: The date when the item was received into the warehouse.
- Item\_Weight: The weight of the item.

## 5. Entity: Bin\_Item

## - Attributes:

- Item\_Number (Foreign Key, Composite Primary Key): The unique number of the item stored in the bin.
- Bay\_Number (Foreign Key, Composite Primary Key): The bay number of the bin storing the item.
- Bin\_Number (Foreign Key, Composite Primary Key): The bin number storing the item.
- Date\_Placed: The date when the item was placed into the bin.