Assignment-1 (Manufacturer)

A manufacturing company produces **products**. The following product information is stored: **product name**, **product ID** and **quantity** on hand. These products are made up of many **components**. Each component can be supplied by one or more **suppliers**. The following component information is kept: **component ID,** **name**, **description**, **suppliers** who supply them, and **products** in which they are used.

Create an ERD to show how you would track this information.

Show entity names, primary keys, attributes for each entity, relationships between the entities and cardinality.

Assumptions

• A supplier can exist without providing components.

• A component does not have to be associated with a supplier.

• A component does not have to be associated with a product. Not all components are used in products.

• A product cannot exist without components

**Products (**productID, product\_name, quantity**) --weak entity**

**Components(** compID**,** productID, supplierID, comp\_name, description**)**

**Suppliers(**supplierID**) –strong entity**

**Comp\_Products(** productID, compID **)**

**Products (0,1)---(1,N) Components (0,1)---(1,N) Suppliers**