EXPERIMENT 1

ER DIAGRAM OF COLLEGE DATABASE

**Aim**: Draw an ER diagram of a college database.

**Components:**

* **Entities:** An entity can be a real-world object, either animate or inanimate, that can be easily identifiable. Denoted using single rectangle for strong entity and double rectangle for weak entity.
  + **Strong entity**: It is an entity whose existence does not depend on the existence of any other **entity** in a schema
  + **Weak entity**: It is an entity whose existence depends on the existence of any other entity in a schema
* **Relationships –** Connects 2 entities. Denoted using diamond for strong relationship and double diamond for weak relationship.
* **Attributes:** These describe the entity to which it is attached.
  + **Simple attribute** − Simple attributes are atomic values, which cannot be divided further. Denoted by oval.
  + **Composite attribute** − Composite attributes are made of more than one simple attribute. Denoted by double oval.
  + **Derived attribute** − Derived attributes are the attributes that do not exist in the physical database, but their values are derived from other attributes present in the database. Denoted by dotted oval.

