1. **Relation:** A table containing data defined by specific categories.

Ex: The EMP and DEPT tables.

Attribute: Describes an object. Must be atomic.

Ex: EMPNO, ENAME, etc.

Domain: The data type specified for an attribute.

Ex: ENAME – varchar(length), HIREDATE - date

Tuple: A single row/record.

Ex: 7369 SMITH CLERK 7902 1980-12-17 800 20

Degree: Number of attributes.

Ex: Degree of EMP table is 8.

Cardinality: Number of rows/records.

Ex: Cardinality of EMP table is 14.

2. **Candidate Key:** A minimal superkey. (minimal = a set with no subset(s) being a super key)

Ex: {EMPNO}, {ENAME}

Primary Key: An unchangeable candidate key

Ex: {EMPNO}

Foreign Key: A set of attribute(s) in one table that is a super key within another table.

Ex: DEPTNO in EMP can uniquely identify a single record in DEPT.

- create table CATEGORY (CatCode varchar(2), CatDesc varchar(10));
- 4. create table EMPLOYEES (Emp_num int, Lastname varchar(20), Firstname varchar(20), Job_class varchar(4));
- 5. alter table EMPLOYEES add EmpDate Date;

alter table EMPLOYEES add EndDate Date;

6. alter table EMPLOYEES modify column Job_class varchar(2);

- 7. alter table EMPLOYEES drop column EndDate;
- 8. rename table EMPLOYEES to JL_EMPS;
- 9. create table EMP (EMPNO int, ENAME varchar(10), JOB varchar(15), MGR int, HIREDATE date, SAL int, COMM int, DEPTNO int); create table DEPT (DEPTNO int, DNAME varchar(15), LOC varchar(15)); alter table EMP add primary key (EMPNO); alter table DEPT add primary key (DEPTNO);