Primary Keys

MAD 202

PRIMARY KEYS

Primary Keys –
- Identifies each row uniquely in a table
- No two rows can have the same primary-key value
- Primary keys do not allow NULLS
- Each table has exactly one primary key

Defining Primary Keys

- Define a primary-key constraint by using the keywords PRIMARY KEY

- No more than one primary-key constraint is allowed in a table

- Must be set to NOT NULL (if you fail to set it, **it is implicitly set by the DBMS**)

- Primary Key values normally don't change after they're changed

PRIMARY KEY Example

```
CREATE TABLE publishers
(
  pub_id CHAR(3)PRIMARY KEY,
  pub_name VARCHAR(20) NOT NULL,
  city VARCHAR(15)        NOT NULL,
  state CHAR(2),
  country VARCHAR(15)   NOT NULL
);
```

PRIMARY KEY Example unnamed table constraint

```
CREATE TABLE publishers
(
  pub_id CHAR(3)NOT NULL,
  pub_name VARCHAR(20)NOT NULL,
  city VARCHAR(15)NOT NULL,
  state CHAR(2),
  country VARCHAR(15)NOT NULL,
  PRIMARY KEY (pub_id)
);
```

PRIMARY KEY – Example - Named table constraint

```
CREATE TABLE publishers
(
  pub_id CHAR(3) NOT NULL,
  pub_name VARCHAR(20)NOT NULL,
  city VARCHAR(15)NOT NULL,
  state CHAR(2),
  country VARCHAR(15)NOT NULL,
  CONSTRAINT publishers_pk
  PRIMARY KEY (pub_id)
);
```