Assignment - 17

Constraining the Values of your data.

1) Create the Orders table so that all onum values as well as all combinations of cnum and snum are different from one another, and so that NULL values are excluded from the date field.

ANSWER÷

```
CREATE TABLE Orders (
    Onum INT PRIMARY KEY,
    Amt FLOAT(7,2),
    Odate DATE NOT NULL,
    Cnum INT NOT NULL,
    Snum INT NOT NULL,
    FOREIGN KEY (Cnum) REFERENCES customers(Cnum),
    FOREIGN KEY (Snum) REFERENCES salespeople(Snum),
    CONSTRAINT unique_cnum_snum UNIQUE (Cnum, Snum)
);
```

2) Create the Salespeople table so that the default commission is 10% with no NULLS permitted, snum is the primary key, and all names fall alphabetically between A and M, inclusive (assume all names will be uppercase).

ANSWER÷

```
mysql> CREATE TABLE Salespeople (
    ->     Snum INT PRIMARY KEY,
    ->     Sname VARCHAR(10) NOT NULL CHECK (Sname
BETWEEN 'A' AND 'M'),
    ->     City VARCHAR(20),
    ->     Comm FLOAT(5,2) NOT NULL DEFAULT 0.10
    -> );
Query OK, 0 rows affected, 1 warning (0.02 sec)
```

3) Create the Orders table, making sure that the onum is greater than the cnum, and the cnum is greater that the snum. Allow no NULLS in any of these three fields.

ANSWER÷

```
mysql> CREATE TABLE Orders (
    ->     Onum INT NOT NULL,
    ->     Amt FLOAT(7,2),
    ->     Odate DATE NOT NULL,
    ->     Cnum INT NOT NULL,
    ->     Snum INT NOT NULL,
    ->     PRIMARY KEY (Onum),
    ->     FOREIGN KEY (Cnum) REFERENCES
customers(Cnum),
    ->     FOREIGN KEY (Snum) REFERENCES
salespeople(Snum),
    ->     CHECK (Onum > Cnum),  -- Ensures onum is
greater than cnum
    ->     CHECK (Cnum > Snum)   -- Ensures cnum is
greater than snum
    -> );
Query OK, 0 rows affected, 1 warning (0.03 sec)
```