

## QUIZ 11 – ICS 321 Fall 2017

**Chapter 7 – The Relational Model.** The relational model consists of five components.

- (1) an open ended collection of types,
- (2) a relational type generator,
- (3) facilities for defining relational variables,
- (4) a relational assignment operator, and
- (5) an open ended relational complete set of generic relational operators.

To the right is a set of SQL operations that define the Supplier-Parts database and initializes it with the data in our running example.

For each of the statements, identify what category or categories it would be in, how and why.

```

DROP TABLE IF EXISTS P;
CREATE TABLE P (
    PNO varchar(2) NOT NULL DEFAULT '',
    PNAME varchar(5) DEFAULT NULL,
    COLOR varchar(5) DEFAULT NULL,
    WEIGHT decimal(3,1) DEFAULT NULL,
    CITY varchar(6) DEFAULT NULL
);
INSERT INTO P (PNO, PNAME, COLOR, WEIGHT, CITY) VALUES
('P1', 'Nut', 'Red', '12.0', 'London'),
('P2', 'Bolt', 'Green', '17.0', 'Paris'),
('P3', 'Screw', 'Blue', '17.0', 'Oslo'),
('P4', 'Screw', 'Red', '14.0', 'London'),
('P5', 'Cam', 'Blue', '12.0', 'Paris'),
('P6', 'Cog', 'Red', '19.0', 'London');
DROP TABLE IF EXISTS S;
CREATE TABLE S (
    SNO varchar(2) NOT NULL DEFAULT '',
    SNAME varchar(5) DEFAULT NULL,
    STATUS int(2) DEFAULT NULL,
    CITY varchar(6) DEFAULT NULL
);
INSERT INTO S (SNO, SNAME, `STATUS`, CITY) VALUES
('S1', 'Smith', 20, 'London'),
('S2', 'Jones', 10, 'Paris'),
('S3', 'Blake', 30, 'Paris'),
('S4', 'Clark', 20, 'London'),
('S5', 'Adams', 30, 'Athens');
DROP TABLE IF EXISTS SP;
CREATE TABLE SP (
    SNO varchar(2) NOT NULL DEFAULT '',
    PNO varchar(2) NOT NULL DEFAULT '',
    QTY int(3) DEFAULT NULL
);
INSERT INTO SP (SNO, PNO, QTY) VALUES
('S1', 'P1', 300),
('S1', 'P2', 200),
('S1', 'P3', 400),
('S1', 'P4', 200),
('S1', 'P5', 100),
('S1', 'P6', 100),
('S2', 'P1', 300),
('S2', 'P2', 400),
('S3', 'P2', 200),
('S4', 'P2', 200),
('S4', 'P4', 300),
('S4', 'P5', 400);

```