

DDL Statements:

```
CREATE TABLE Pizza(  
    pizzaName    VARCHAR(50),  
    pizzaCrust   VARCHAR(50),  
    CONSTRAINT pizza_pk PRIMARY KEY (pizzaName)  
);  
  
CREATE TABLE Ingredients(  
    ingredientName VARCHAR(50),  
    CONSTRAINT ingredient_pk PRIMARY KEY (ingredientName)  
);  
  
CREATE TABLE Size(  
    diameter     INTEGER,  
    name         VARCHAR(50),  
    CONSTRAINT size_pk PRIMARY KEY (diameter)  
);  
  
CREATE TABLE Pizza_Topping(  
    ingredientName VARCHAR(50) not null,  
    pizzaName VARCHAR(50) not null,  
    meat          BOOLEAN,  
    CONSTRAINT pizzaTopping_pk PRIMARY KEY (ingredientName, pizzaName),  
    CONSTRAINT pizzaTopping_Ingredients_fk FOREIGN KEY (ingredientName)  
REFERENCES Ingredients (ingredientName),  
    CONSTRAINT pizzaTopping_Pizza_pk FOREIGN KEY (pizzaName) REFERENCES Pizza  
(pizzaName)  
);  
  
CREATE TABLE Cost(  
    price DOUBLE,  
    pizzaName VARCHAR(50) not null,  
    diameter int not null,  
    CONSTRAINT cost_pk PRIMARY KEY (pizzaName, diameter, price),  
    CONSTRAINT cost_Pizza_fk FOREIGN KEY (pizzaName) REFERENCES Pizza  
(pizzaName),  
    CONSTRAINT cost_Size_fk FOREIGN KEY (diameter) REFERENCES Size (diameter)  
);
```

DML Insert:

```
INSERT INTO Pizza  
VALUES ('Carnivores Challenge', 'Deep Dish'),  
      ('Vegetarian Delight', 'NY Style');
```

```
INSERT INTO Ingredients  
VALUES ('Pepperoni');
```

```

        ('Bell Pepper'),
        ('MeatBall'),
        ('Mushroom'),
        ('Mozzarella'),
        ('Anchovy'),
        ('Onion'),
        ('Pineapple');

INSERT INTO Ingredients
VALUES ('Bacon');

INSERT INTO Size
VALUES (5, 'individual'),
       (10, 'small'),
       (15, 'medium'),
       (20, 'large'),
       (30, 'wow!');

INSERT INTO Pizza_Topping
VALUES ('Pepperoni', 'Carnivores Challenge', TRUE),
       ('MeatBall', 'Carnivores Challenge', TRUE),
       ('Anchovy', 'Carnivores Challenge', TRUE),
       ('Bacon', 'Carnivores Challenge', TRUE),
       ('Mozzarella', 'Carnivores Challenge', TRUE),
       ('Bell Pepper', 'Vegetarian Delight', FALSE),
       ('Mushroom', 'Vegetarian Delight', FALSE),
       ('Onion', 'Vegetarian Delight', FALSE),
       ('Pineapple', 'Vegetarian Delight', FALSE),
       ('Mozzarella', 'Vegetarian Delight', FALSE);

INSERT INTO Cost
VALUES (10.00, 'Carnivores Challenge', 5),
       (15.00, 'Carnivores Challenge', 10),
       (20.00, 'Carnivores Challenge', 15),
       (25.00, 'Carnivores Challenge', 20),
       (30.00, 'Carnivores Challenge', 30),
       (11.00, 'Vegetarian Delight', 5),
       (16.00, 'Vegetarian Delight', 10),
       (21.00, 'Vegetarian Delight', 15),
       (26.00, 'Vegetarian Delight', 20),
       (31.00, 'Vegetarian Delight', 30);

```

DML Query for Pizza and Size:

```

SELECT pizzaName, name, diameter
FROM Pizza NATURAL JOIN Size;

```

Output Result 10			
10 rows			
	PIZZANAME	NAME	DIAMETER
1	Carnivores Challenge	individual	5
2	Vegetarian Delight	individual	5
3	Carnivores Challenge	small	10
4	Vegetarian Delight	small	10
5	Carnivores Challenge	medium	15
6	Vegetarian Delight	medium	15
7	Carnivores Challenge	large	20
8	Vegetarian Delight	large	20
9	Carnivores Challenge	wow!	30
10	Vegetarian Delight	wow!	30

Carnivores Challenge,individual,5
 Vegetarian Delight,individual,5
 Carnivores Challenge,small,10
 Vegetarian Delight,small,10
 Carnivores Challenge,medium,15
 Vegetarian Delight,medium,15
 Carnivores Challenge,large,20
 Vegetarian Delight,large,20
 Carnivores Challenge,wow!,30
 Vegetarian Delight,wow!,30

DML Query for ingredient name and crust type:

```

SELECT ingredientName, pizzaName, pizzaCrust
FROM Pizza_Topping NATURAL JOIN Pizza;

```

	INGREDIENTNAME	PIZZANAME	PIZZACRUST
1	Anchovy	Carnivores Challenge	Deep Dish
2	Bacon	Carnivores Challenge	Deep Dish
3	Bell Pepper	Vegetarian Delight	NY Style
4	MeatBall	Carnivores Challenge	Deep Dish
5	Mozzarella	Carnivores Challenge	Deep Dish
6	Mozzarella	Vegetarian Delight	NY Style
7	Mushroom	Vegetarian Delight	NY Style
8	Onion	Vegetarian Delight	NY Style
9	Pepperoni	Carnivores Challenge	Deep Dish
10	Pineapple	Vegetarian Delight	NY Style

Anchovy,Carnivores Challenge,Deep Dish
 Bacon,Carnivores Challenge,Deep Dish
 Bell Pepper,Vegetarian Delight,NY Style
 MeatBall,Carnivores Challenge,Deep Dish
 Mozzarella,Carnivores Challenge,Deep Dish
 Mozzarella,Vegetarian Delight,NY Style
 Mushroom,Vegetarian Delight,NY Style
 Onion,Vegetarian Delight,NY Style
 Pepperoni,Carnivores Challenge,Deep Dish
 Pineapple,Vegetarian Delight,NY Style