

Stage 4

Trigger

```
DELIMITER $$

CREATE TRIGGER Before_Insert_Users
BEFORE INSERT ON users
FOR EACH ROW
BEGIN
    DECLARE suffix INT;
    SET suffix = 1;

    WHILE EXISTS
        (SELECT 1 FROM users WHERE name = NEW.name) DO
        SET NEW.name = CONCAT(NEW.name, suffix);
        SET suffix = suffix + 1;
    END WHILE;
END$$

DELIMITER ;
```

Stored Procedure

```
DELIMITER $$

CREATE PROCEDURE AddIngredientToPantry(
    IN _userID INT,
    IN _pantryID INT,
    IN _ingredientName VARCHAR(20),
    IN _quantity FLOAT
)
BEGIN
```

```

DECLARE _ingredientID INT;

SELECT ingredientID INTO _ingredientID
FROM ingredients
WHERE ingredientName = _ingredientName;

IF _ingredientID IS NULL THEN
    INSERT INTO ingredients (ingredientName)
    VALUES (_ingredientName);

    SET _ingredientID = LAST_INSERT_ID();
END IF;

IF EXISTS (SELECT 1 FROM userpantries
    WHERE memberID = _userID
    AND pantryID = _pantryID) THEN

    INSERT INTO pantry (pantryID, ingredientID, quantity)
    VALUES (_pantryID, _ingredientID, _quantity);
ELSE
    SIGNAL SQLSTATE '45000'
    SET MESSAGE_TEXT =
        'No matching pantry found for this user.';
END IF;
END$$

DELIMITER ;

```