1. Database Design

1.1 CREATE TABLE Address (

address\_id INT PRIMARY KEY,

building VARCHAR(50),

level VARCHAR(20),

room VARCHAR(20),

carpark VARCHAR(50),

lobby VARCHAR(50),

pantry VARCHAR(50),

kiosk VARCHAR(50),

additional\_details VARCHAR(100)

);

INSERT INTO Address (address\_id, building, level, room, carpark, lobby, pantry, kiosk, additional\_details)

VALUES

(1, 'Building A', NULL, NULL, 'Carpark', NULL, NULL, NULL, NULL),

(2, 'Building A', 'Level 2', NULL, NULL, NULL, NULL, NULL, NULL),

(3, 'Building A', 'Level 2', 'Room 201', NULL, NULL, NULL, NULL, NULL),

(4, 'Building B', 'Level 1', NULL, NULL, NULL, 'Pantry', NULL, NULL),

(5, 'Building B', 'Level 1', 'Room 101', NULL, NULL, NULL, NULL, NULL),

(6, 'Building B', 'Level 1', 'Room 101', NULL, 'Lobby C', NULL, NULL, NULL),

(7, 'Building B', 'Level 1', 'Room 101', NULL, 'Lobby C', 'Kios A', NULL, NULL),

(8, 'Building B', 'Level 1', 'Room 101', NULL, 'Lobby C', 'Kios A', 'XXX', NULL),

(9, 'Building B', 'Level 1', 'Room 101', NULL, 'Lobby C', 'Kios A', 'XXX', '...');