# Test Description

**Test Name or ID**: populateMap – BlackBoxTest

**Test Type**: Black box

**Description**: This test aims to verify the functionality of the populateMap function. The function is responsible for creating and populating a map with building positions represented by a 2D array. This test will check if the function correctly creates and returns a struct Map object representing the populated map.

**Setup:** Set up the environment with an empty struct Map object to store the populated map.

**Test Function**: populateMap()

**Test Scenarios:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Description | Test Data | Expected Result | Actual Result | Pass/Fail |
| General Case | None | The returned map is populated with buildings and empty spaces according to the predefined layout. |  |  |
| Map Size Verification | None | The size of the returned map is 25x25. |  |  |
| Building Positions Verification | None | The positions of the buildings in the returned map match the predefined layout. |  |  |
| Empty Space Positions Verification | None | The positions of the empty spaces in the returned map match the predefined layout. |  |  |
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**Bugs Found**: