**Test Cases for OldPhoneKeyPadConverter**

This document provides a detailed suite of test cases to ensure the OldPhonePad method functions correctly under various conditions.

| **Input String** | **Expected Output** | **Notes** |
| --- | --- | --- |
| **Basic Cases** | | |
| 33# | E | Simple two-press case. |
| 4433555 555666# | HELLO | The primary "HELLO" example with a space delimiter. |
| 222 2 22# | CAB | Demonstrates using a space for consecutive letters from the same key. |
| **Backspace Cases** | | |
| 123\*# | &A | Types "&AD", then backspaces the "D". |
| \*11# | ' | Backspace at the start does nothing, then types '. |
| 555\*555# | L | Types "L", backspaces it, then types "L" again. |
| **Edge & Invalid Cases** | | |
| # |  | An empty message. |
|  |  | Invalid input (null/empty string). |
| 12345 |  | Invalid input (missing '#'). |
| \*# |  | Input with only a backspace. |
| abc# |  | Input with invalid characters should be ignored. |
| **Character Wrapping Cases** | | |
| 77777# | P | Tests wrapping around on the '7' key (P->Q->R->S->P). |
| **Complex Cases** | | |
| 8 88777444666\*664# | TURING | A complex sequence involving spaces and a backspace. |
| 7777\*33# | E | Types "S", backspaces it, then types "E". |
| 2\*22\*222# | C | Mix of backspaces and key presses. |