**Mars**

Space Complexity: **O(n)**

The main components that consume space in this program are the input string “s”, the “expectedSOS” variable, and “changes” variable. The space complexity of the input string is O(n), with n the length of the string. The space complexity of the variables “expectedSOS” and “changes” is O(1) as they are string of length 3 and an integer respectively.

Therefore, the space complexity of this program is O(n) because it mainly depends on the length of the input string `s`.

Time Complexity: **O(n)**

The marsExploration function iterates through the characters of the input string `s`. For each character in `s`, it compares it with the corresponding character in the "SOS" pattern, and if they are different, it increments the `changes` variable. The for loop runs for each character in the input string, so the time complexity of this loop is O(n), where n is the length of the input string. The character comparison operation within the loop is constant time, O(1). O(n) is the more dominant factor.

Therefore, the overall time complexity of the program is O(n), where n is the length of the input string.