JS1 // Music Class

As we know for a piano, there is a range of notes from C, D, E, F, G, A, and B. In music, there is something called the golden ratio. In order for the song to be in the golden ratio, it needs to fulfill these requirements:

- The total notes of C must equal the total notes of B
- The sum of the notes of D and E must be half of the total notes of A
- Every 4th note must be G
- The total notes of B must be less than or equal to A

Input Specification:

The first line will contain a string of notes.

Output Specification:

Output THIS SONG BOPS if the song is in the golden ratio, and THIS DOES NOT BOP if the song is not in the golden ratio.

Sample Input:

BBBGBCCGCAAGAAAGAAAGDDEGEC

Sample Output:

THIS SONG BOPS

Sample Input:

BBBGBCCGCAAGAAAGAAABDDEGEB

Sample Output:

THIS SONG DOES NOT BOP