

The Pied Piper has been enlisted to play his magical tune and drive away all rats from Hamelin. Wait, something is not right, some of the rats are deaf and are going the wrong way!! Given that these character combinations represent:

- P = The Pied Piper (there can only be one Pied Piper)
- O~ = Rat going left
- ~O = Rat going right

We need you to find out how many deaf rats live in Hamelin (we know a rat is deaf when it is not looking towards the Pied Piper) . You must build a Java based REST service that receives a String and returns a meaningful REST response with the number of deaf rats for that specific scenario. Some example inputs and results would be:

- The input “~O~O~O~OP” would return “There are 0 deaf rats in Hamelin”
- ex2 “PO~O~~OO~” would return “There is 1 deaf rat in Hamelin”
- ex3 “~OO~~O~OPO~~OO~” would return “There are 2 deaf rats in Hamelin”

We are not including any specific time constraint on this exercise so we expect a properly coded solution that you would be happy to deploy in a pre-production environment. Show us your best coding!