Algorithm 1 RoadRunner-like implementation

Preprocess the wrapper and the sample
Call RoadRunner
procedure RoadRunner($wrapper, sample, idx_{wrapper}, idx_{sample}, result$)
    if *the end of the wrapper or the sample is reached* **then**
        The recursion is finished, return the final result
    end if
    Get the current element from the wrapper and the sample
    if *the elements are the same* **then**
        Append the current element to the result
        Call RoadRunner from the next positions in the wrapper and in the sample
    else if *the elements are not the same, but both of them are string* **then**
        Append **#text** to the result
        Call RoadRunner from the next positions in the wrapper and in the sample
    else
        Search for potential loops begins
        Find the elements on the previous positions in both wrapper and sample
        Set **is_optional** to False
        if *the previous tag in the wrapper is closing* **and** *the current tag in the wrapper is opening* **and** *they are of the same nature* **then**
            There is a loop detected in the wrapper
            Find the part of the HTML code in the wrapper that makes a square
            if *the opening tag that needs closing in the sample loop is found* **then**
                Call RoadRunner within the found squares
                if *the previous statement returned some result* **then**
                    Call RoadRunner from the current position in the sample and from the position that comes after the loop in the wrapper
                    Append the result from the square to the main result
                else
                    is_optional = True
                end if
            else
                is_optional = True
            end if
        else if *the previous tag in the sample is closing* **and** *the current tag in the sample is opening* **and** *they are of the same nature* **then**
            There is a loop detected in the sample
            repeat steps 20-30 for the current element from the sample
        else
            is_optional = True
        end if
    end if
    if **is_optional** *is True* **then**
        if *current elements in the wrapper and sample are tags* **then**
            There are two tags on the same line, find which one is optional
            if *the optional tag is in the sample* **then**
                Append the optional tag to the result
                Call RoadRunner from the current position in the wrapper and from the position that comes after the optional tag in the sample
            else *the optional tag is in the wrapper*
                Append the optional tag to the result
                Call RoadRunner from the current position in the sample and from the position that comes after the optional tag in the wrapper
            end if
        else if *only the current element in the wrapper is a tag* **then**
            Find the match of the tag in the sample
            Append the optional elements to the result
            Call RoadRunner from the current position in the wrapper and from the position that comes after the optional elements in the sample
        else if *only the current element in the sample is a tag* **then**
            Find the match of the tag in the wrapper
            Append the optional elements to the result
            Call RoadRunner from the current position in the sample and from the position that comes after the optional elements in the wrapper
        else *no optional elements were found*
            Call RoadRunner from the next positions in the wrapper and in the sample
        end if
    end if
end procedure