

DFA I - WYSWYG

We want to build a DFA that will recognize if the string '**WYSWYG**' appears in a sequence of characters. We will add to the standard notation to make this reasonable to draw that an edge marked **REST** will be taken for all inputs that are not taken by any other edge from that state.

Solution:

DFA II - Odd Even

This DFA will look at an input of 0s and 1s and accept if the input is the following.

A sequence of an odd number of 0s followed by any number of 1s. If there is at least one 1 this can be followed by any positive even number of 0s followed by any number of 1s. At this point if there is at least one 1 the sequence can repeat the pattern.

Some examples include the following.

- 000
- 01111
- 0100
- 010011111
- 0100001000

Solution: