

Telelearn for October 8, 2014

Determine a regular expression which will match on the appropriate strings or else will find the indicated matches.

Assumption: each string starts on a new line and no characters follow

21. Determine whether a string is either 0, 100, or 101. Careful!

$$/^ (0|100|101) \$ /$$

22. Determine whether a given string is a binary string or not.

$$/^ [01]^+ \$ /$$

23. Given a binary string, what regular expression determines whether the string is even?

$$/^ .*0 \$ /$$

24. Determine those words in the earlier text that have at least two vowels.

$$/^ \backslash b \backslash w^* [aeiouy] \backslash w^* [aeiouy] \backslash w^* \backslash b /$$

25. Given a string, determine whether it is a binary string, and if so, whether it is even (ie. a match on all even binary strings; otherwise fail to match).

$$/^ [01]^*0 \$ /$$

26. Determine whether a given string is an even base 10 integer.

$$/^ \backslash d^* [02468] \$ /$$

27. Determine all words in the prior text that end in a vowel.

$$/^ \backslash b \backslash w^* [aeiouy] \backslash b /$$

28. Determine whether a given string is a binary string containing 110 as a substring.

$$/^ [0]^* 110 [0]^* \$ /$$

29. All strings with length at least one but at most three.

$$/^ \{1,3\} \$ /$$

30. Determine whether a string is a binary string that has the same number of 01 substrings as 10

substrings
$$/^ ((0[01]^*0)|(1[01]^*1)) \$ /$$