

Regular Expression

Regular Expression – better known as Regex – is pattern matching. As regular expressions are regular, it means they are used to match well-defined patterns. Regular expression or pattern matching tools identify words and phrases with common patterns. A typical use case for Regex is find and replace, however as it is not able to understand syntax, grammar, or context, Regex solutions tend to operate on a very small well-defined problem set. Basically, Regex solutions are using pattern matching to merely identify similarities and differences in patterns of words and phrases. They are not able to identify words and phrases taking into consideration syntax, grammar and ultimately context.

You will be facing some challenging questions on Regex in this assignment. Below following steps would help you to complete this assignment:

1. Read the question
2. Go to the link given under the question
3. You will land on Hakerrank page, if not then create your Hakerrank account.
4. Once you land on hankerank page mentioned under question, go through the given problem carefully.
5. Solve it in the editor given in the page. Select python3 as your language in the editor and click 'Run Code' Button
6. Once you have passed all the sample test cases, write your solution in this assignment against each question.

If you need any assistance on Regex, then please refer below links:

YouTube reference: <https://www.youtube.com/watch?v=zN8rwVXwRUE> (<https://www.youtube.com/watch?v=zN8rwVXwRUE>)

Regex doc: <https://docs.python.org/3/howto/regex.html> (<https://docs.python.org/3/howto/regex.html>)

Q1. Matching string problem

<https://www.hackerrank.com/challenges/matching-specific-string/problem>
(<https://www.hackerrank.com/challenges/matching-specific-string/problem>)

Q2 Matching anything

link - <https://www.hackerrank.com/challenges/matching-anything-but-new-line/problem>
(<https://www.hackerrank.com/challenges/matching-anything-but-new-line/problem>)

Q3 Matching non digit character

link - <https://www.hackerrank.com/challenges/matching-digits-non-digit-character/problem>
(<https://www.hackerrank.com/challenges/matching-digits-non-digit-character/problem>).

```
Regex_Pattern = r"\d\d\D\d\d\D\d\d\d" # Do not delete 'r'.
```

or

```
Regex_Pattern = r"\d{2}\D\d{2}\D\d{4}" # Do not delete 'r'
```

Q4 matching whitespace - non whitespace

link - https://www.hackerrank.com/challenges/matching-whitespace-non-whitespace-character/problem?h_r=next-challenge&h_v=zen (https://www.hackerrank.com/challenges/matching-whitespace-non-whitespace-character/problem?h_r=next-challenge&h_v=zen).

Q5 matching start end problem

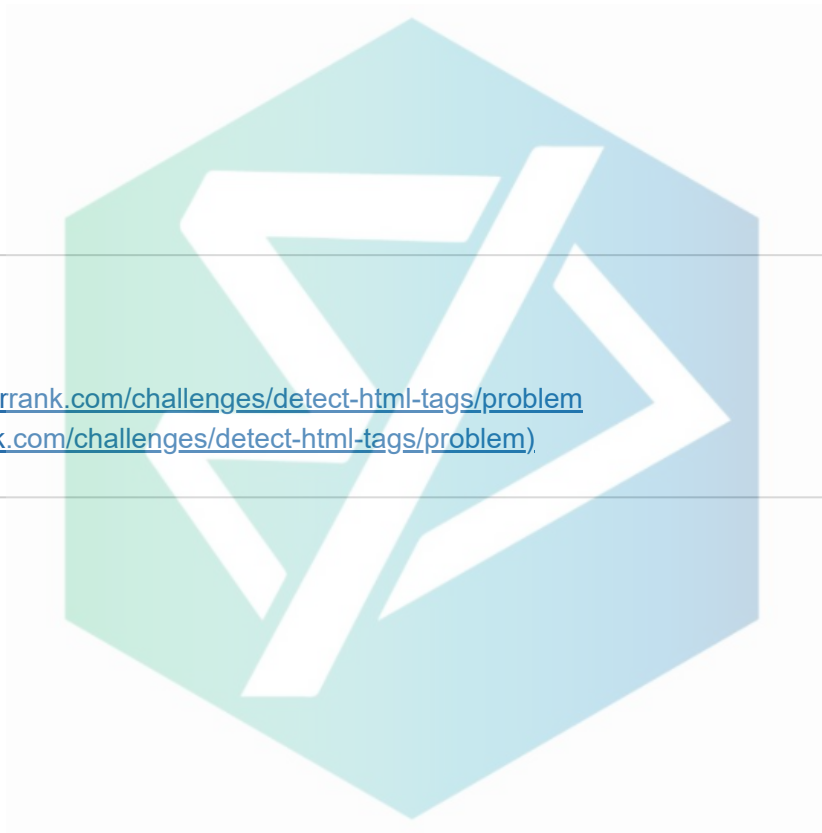
link - https://www.hackerrank.com/challenges/matching-start-end/problem?h_r=next-challenge&h_v=zen&h_r=next-challenge&h_v=zen&h_r=next-challenge&h_v=zen
(https://www.hackerrank.com/challenges/matching-start-end/problem?h_r=next-challenge&h_v=zen&h_r=next-challenge&h_v=zen).

Q6 negative lookahead

link - <https://www.hackerrank.com/challenges/negative-lookbehind/problem>
(<https://www.hackerrank.com/challenges/negative-lookbehind/problem>).

Q7 Html attribute problem

link - <https://www.hackerrank.com/challenges/html-attributes/problem>
(<https://www.hackerrank.com/challenges/html-attributes/problem>)



Q8 detect html tags

link - <https://www.hackerrank.com/challenges/detect-html-tags/problem>
(<https://www.hackerrank.com/challenges/detect-html-tags/problem>)

Q9 final substring problem

link - <https://www.hackerrank.com/challenges/find-substring/problem>
(<https://www.hackerrank.com/challenges/find-substring/problem>)

Q 10 Alien username

link - <https://www.hackerrank.com/challenges/alien-username/problem>
(<https://www.hackerrank.com/challenges/alien-username/problem>)

Q11 ip address validation

link - <https://www.hackerrank.com/challenges/ip-address-validation/problem>
(<https://www.hackerrank.com/challenges/ip-address-validation/problem>)

Q 12 find a word problem

link - <https://www.hackerrank.com/challenges/find-a-word/problem>
(<https://www.hackerrank.com/challenges/find-a-word/problem>)

Q13 detect the email address

link - <https://www.hackerrank.com/challenges/detect-the-email-addresses/problem>
(<https://www.hackerrank.com/challenges/detect-the-email-addresses/problem>)

Q14 detect the domain problem

link - <https://www.hackerrank.com/challenges/detect-the-domain-name/problem>
(<https://www.hackerrank.com/challenges/detect-the-domain-name/problem>)

Q15 ide challenge

link - <https://www.hackerrank.com/challenges/ide-identifying-comments/problem>
(<https://www.hackerrank.com/challenges/ide-identifying-comments/problem>)

Q16 programming language detection problem

link - <https://www.hackerrank.com/challenges/programming-language-detection/problem>
(<https://www.hackerrank.com/challenges/programming-language-detection/problem>)

"Holly jolly":) Congratulations! you have completed the REGEX assignment.

FeedBack

We hope you've enjoyed this course so far. We're committed to help you use "AI for All" course to its full potential, so that you have a great learning experience. And that's why we need your help in form of a feedback here.

Please fill this feedback form <https://zfrmz.in/MtRG5oWXBdesm6rmSM7N>
(<https://zfrmz.in/MtRG5oWXBdesm6rmSM7N>).

