

1. **Which of the following matches regex /abababa/?**

- 1. abababa
- 2. aaba
- 3. aabbbaa
- 4. aba
- 5. aabababa

The regex /abababa/ looks for an identical match in terms of characters inserted i.e. it matches the exact term given.

2. **Which of the following matches regex /ab+c?/?**

- 1. abc
- 2. ac
- 3. abbb
- 4. bbc

The regex /ab+c?/ matches any term which starts with "a", followed by one or more "b"s with an optional character "c".

3. **Which of the following matches regex /a.[bc]+/?**

- 1. abc
- 2. abbbbbbb
- 3. azc
- 4. abcbcbcb
- 5. ac
- 6. asccbbbbcbbccc

The regex /a.[bc]+/ matches any term starting with the character "a" followed by any character, and then it matches one or more items from a list containing characters "b" and "c".

4. **Which of the following matches regex /abc|xyz/?**

- 1. abc
- 2. xyz
- 3. abc|xyz

The regex /abc|xyz/ matches the terms containing the following characters by order "abc" or "xyz".

5. Which of the following matches regex `/[a-z]+[\.\?!]/?`

- 1. battle!
- 2. Hot
- 3. green
- 4. swamping
- 5. jump up
- 6. undulate?
- 7. is.?

The regex `/[a-z]+[\.\?!]/` matches one or more non capitalised english alphabet characters followed by either a dot, question mark, or an exclamation mark.

6. Which of the following matches regex `/[a-zA-Z]*[^\,]=/`

- 1. Butt=
- 2. BotHEr,=
- 3. Ample
- 4. FldDIE7h=
- 5. Brittle =
- 6. Other.=

The regex `/[a-zA-Z]*[^\,]=/` matches zero or more alphabet characters(both capitalised and not), followed by any character that isn't a comma(“,”), and ending with an equal symbol(“=”).

7. Which of the following matches regex `/[a-z][\.\?!]\s+[A-Z]/?` (\s matches any space character)

- 1. A. B
- 2. c! d
- 3. e f
- 4. g. H
- 5. i? J
- 6. k L

The regex `/[a-z][\.\?!]\s+[A-Z]/` matches any non capitalised english alphabet character followed by either a dot, question mark or exclamation mark, then followed by one or more spaces and ends with a capitalised english alphabet character.

8. Which of the following matches regex `/(very)+(fat)?(tall|ugly) man/?`

- 1. very fat man
- 2. fat tall man
- 3. very very fat ugly man
- 4. very very very tall man

The regex `/(very)+(fat)?(tall|ugly) man/` matches the following:

The word very and a space one or more times, followed by optional term fat and a space followed with the word “tall” or “ugly” and ends with a space followed by the word “man”.

9. Which of the following matches regex `<[>]+>/?`

1. `<an xml tag>`
2. `<opentag> <closetag>`
3. `</closetag>`
4. `<>`
5. `<with attribute="77">`

The regex `<[>]+>/?` matches any pattern which starts with a less-than sign, followed by one or more characters that are not a greater-than sign, and ends with a greater-than sign.

10. Write a regex to identify dates of the form `dd/mm/yyyy`.

I expect dd to range from 01 to 31, and mm to range from 01 to 12, and I expect yyyy to range from 0001 to 9999 and in particular to not be 0000 (the Gregorian calendar predates this; see Year 0 and the invention of 0). However, I do not expect you to cross-reference mm against dd or to restrict yyyy, so that e.g. 31/02/0231 is fine.

Do not use backreferences or negative lookahead (so if your answer contains `?!`, then it's not admissible for this question).

```
^(?:0[1-9])|(?:[1-2]\d)|(?:3[0-1]))\/(?:0[1-9])|(?:1[0-2]))\/(?:0{3}[1-9])|(?:0{2}[1-9]\d)|(?:0{1}[1-9]\d{2})|(?:[1-9]\d{3}))$/gm
```

11. Write a regex to identify dates of the form `dd/mm/yyyy` or

`dd.mm/yyyy`, but not using mixed separators such as `dd/mm/yyyy`.

You may use backreferences, negative lookahead, and other fancy tricks, if convenient.

```
^(?:0[1-9])|(?:[1-2]\d)|(?:3[0-1]))(\/|\.)(?:0[1-9])|(?:1[0-2]))\2(?:0{3}[1-9])|(?:0{2}[1-9]\d)|(?:0{1}[1-9]\d{2})|(?:[1-9]\d{3}))$/gm
```