

## Homework lecture 13

### String processing

1. Which of the following matches regular expression `<[^>]+>/`

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

2. Which of the following matches regular expression `/a.[bc]+/`

- 1) `abc`
- 2) `abbbbbbbb`
- 3) `azc`
- 4) `abcbcbcbc`
- 5) `ac`
- 6) `azccbbbbcbbcc`

3. Which of the following matches regular expression `/(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`

4. Write a regular expression that matches only and exactly strings of form `"abc.def.ghi.jkx"`, where each variable *a*, *b*, *c*, *d*, *e*, *f*, *g*, *h*, *i*, *j*, *k*, *x* can be any single character except the newline.

For example: `"its.not.the.cat"`, `"098.750.454.210"`, `"!!!!!!!!!!!!"`

*The dot (.) in regex matches anything except for a newline.*

5. Write a regular expression that matches these numbers:

- `(123) 456 7899`
- `(123).456.7899`
- `(123)-456-7899`
- `123-456-7899`
- `123 456 7899`
- `1234567899`

6. Write a regular expression that validate strings which:

- can consist of numbers, lowercase and uppercase characters.
- can consist of separators: hyphens, underscores, spaces.
- do not have two consecutive separators.
- do not have separators at the start or the end.