

# regex\_exercises

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## 0.1 Code for RegEx exercises

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```
[ ]: import re
```

**Question 1-** Write a RegEx pattern in python program to check that a string contains only a certain set of characters (in this case a-z, A-Z and 0-9).

```
[ ]: doc='abc_1999 yellowhouse I love python & ML'
    pattern='^[^W_]+'
    p=re.compile(pattern=pattern, flags=re.IGNORECASE)
    p.findall(doc)
```

```
[ ]: ['abc', '1999', 'yellowhouse', 'I', 'love', 'python', 'ML']
```

### 0.4.1 Question 2- Write a RegEx pattern that matches a string that has an a followed by zero or more b's

```
[ ]: doc='abc_1999 yellowhouse I love python & ML babbble abb is my friend who is a ML engineer'
    pattern='(ab*)'
    p=re.compile(pattern=pattern, flags=re.IGNORECASE)
    p.findall(doc)
```

```
[ ]: ['ab', 'abbb', 'abb', 'a']
```

### 0.4.2 Question 3- Write a RegEx pattern that matches a string that has an a followed by one or more b's

```
[ ]: doc='abc_1999 yellowhouse I love python & ML babbble abb is my friend who is a ML engineer'
    pattern='(ab+)'
    p=re.compile(pattern=pattern, flags=re.IGNORECASE)
    p.findall(doc)
```

```
[ ]: ['ab', 'abbbb', 'abb']
```

**0.4.3 Question 4-** Write a RegEx pattern that matches a string that has an 'a' followed by zero or one 'b'.

```
[ ]: doc='abc_1999 yellowhouse I love python & ML babbbble abb is my friend who is a ML engineer'
      pattern='(ab?)'
      p=re.compile(pattern=pattern, flags=re.IGNORECASE)
      p.findall(doc)
```

```
[ ]: ['ab', 'ab', 'ab', 'a']
```

**0.4.4 Question 5-** Write a RegEx pattern in python program that matches a string that has an 'a' followed by three 'b's.

```
[ ]: doc='abc_1999 yellowhouse I love python & ML babbbble abbb is my friend who is a ML engineer'
      pattern='(ab{3,3})'
      p=re.compile(pattern=pattern, flags=re.IGNORECASE)
      p.findall(doc)
```

```
[ ]: ['abbb', 'abbb']
```

**0.4.5 Question 6-** Write a RegEx pattern in python program that matches a string that has an 'a' followed by two to three 'b's.

```
[ ]: doc='abc_1999 yellowhouse I love python & ML babbbble abb is my friend who is a ML engineer'
      pattern='(ab{2,3})'
      p=re.compile(pattern=pattern, flags=re.IGNORECASE)
      p.findall(doc)
```

```
[ ]: ['abbb', 'abb']
```

**0.4.6 Question 7-** Write a Python program that matches a string that has an 'a' followed by anything, ending in 'b'.

```
[ ]: doc='bc_1999 yellowhouse I love python & ML babbbble abb'
      pattern='a.*b$'
      p=re.compile(pattern=pattern, flags=re.IGNORECASE)
      p.findall(doc)
```

```
[ ]: ['babbbble abb']
```

**0.4.7 Question 8- Write a RegEx pattern in python program that matches a word at the beginning of a string.**

```
[ ]: doc='bc_1999 yellowhouse I love python & ML bc_1999 abb'
      pattern='^(bc_1999)'
      p=re.compile(pattern=pattern, flags=re.IGNORECASE)
      p.findall(doc)
```

```
[ ]: ['bc_1999']
```

**0.4.8 Question 9- Write a RegEx pattern in python program that matches a word at the end of a string.**

```
[ ]: doc='bc_1999 yellowhouse I love python & ML bc_1999'
      pattern='(bc_1999)$'
      p=re.compile(pattern=pattern, flags=re.IGNORECASE)
      p.search(doc)
```

```
[ ]: <re.Match object; span=(38, 45), match='bc_1999'>
```

**0.4.9 Question 10- Write a RegEx pattern in python program to find all words that are 4 digits long in a string.**

```
[ ]: doc='01 0132 231875 1458 301 2725.'
      pattern='\D\d{4,4}\D'
      p=re.compile(pattern=pattern, flags=re.IGNORECASE)
      [re.search('\d+', number).group() for number in p.findall(doc)]
```

```
[ ]: ['0132', '1458', '2725']
```