

Regex Questions

For each example below find a single regex expression that will extract or find all instances of the pattern

Show that it works in each case, with no false detections

```
In [1]: import re
```

Problem 1

Using the text below, extract all e-mail addresses from the three lines of text

```
In [14]: text = "Contact us at support@example.com or sales@company.net."
text2 = "Heat @ 200 C for 3 minutes"
text3 = "We we purchaes 200 units@ $40 each, let me know at if that works, I"

regex = "[A-Za-z0-9]+@[A-Za-z]+\.[A-Za-z]{3}"
re.findall(regex, text)
```

```
Out[14]: ['support@example.com', 'sales@company.net']
```

```
In [15]: re.findall(regex, text2)
```

```
Out[15]: []
```

```
In [16]: re.findall(regex, text3)
```

```
Out[16]: ['SmithW@dubious.com']
```

Problem 2

Extract years in Month/Day/Year format

dashes or slashes should be okay

```
In [24]: text = "The event will be held on 10-27-2023."
text2 = "Today is 7/24/2025"
text3 = "The part number is 123-1-3785"

date_regex = "\d{1,2}[-/]\d{2}[-/]\d{4}"
re.findall(date_regex, text)
```

```
Out[24]: ['10-27-2023']
```

```
In [25]: re.findall(date_regex, text2)
```

```
Out[25]: ['7/24/2025']
```

```
In [26]: re.findall(date_regex, text3)
```

```
Out[26]: []
```

Problem 3

Find the string that starts with an upper or lower case A (or a)

```
In [34]: text="Bob is out sick today"
text2="again, Bob is out sick"
text3="Aargh, we will be short-handed for the dinner rush"
case_regex = "^[Aa].*"
re.findall(case_regex, text)
```

```
Out[34]: []
```

```
In [35]: re.findall(case_regex, text2)
```

```
Out[35]: ['again, Bob is out sick']
```

```
In [36]: re.findall(case_regex, text3)
```

```
Out[36]: ['Aargh, we will be short-handed for the dinner rush']
```

Problem 4

Write a single regex operation that removes all the excess spaces from the text below

```
In [56]: text="    Hello    Delaware    !!"
text2="Were is Bob?"
text3=" How did we get    here"

remove_regex = '\s{2,}'
re.sub(remove_regex, ' ', text).strip()
```

```
Out[56]: 'Hello Delaware !'
```

```
In [57]: re.sub(remove_regex, ' ', text2).strip()
```

```
Out[57]: 'Were is Bob?'
```

```
In [58]: re.sub(remove_regex, ' ', text3).strip()
```

```
Out[58]: 'How did we get here'
```

Problem 5

Extract the full web address

```
In [63]: text="check out the website at https://WiggleWare.com"
text2="The reference site is http://lotsa_bugs.edu"

web_regex = "http[s]?://[a-zA-z]+\.[A-Za-z]{3}"
re.findall(web_regex, text)
```

```
Out[63]: ['https://WiggleWare.com']
```

```
In [64]: re.findall(web_regex, text2)
```

```
Out[64]: ['http://lotsa_bugs.edu']
```

```
In [ ]:
```