:[13] In

```
import re
#Exercise 1: For a given sentence, demonstrate how to applyRegEx.
txt = "Regular expression is a sequence of character(s) mainly used to find and replace pat
x = re.search("^Regular.*file$", txt)
if x:
    print("YES! We have a match!")
else:
    print("No match")
```

!YES! We have a match

:[14] In

```
#Replacing words using regular expressions
import re
replacement_patterns = [
(r'won\'t', 'will not'),
(r'can\'t', 'cannot'),
(r'i\'m', 'i am'),
(r'ain\'t', 'is not'),
(r'(\w+)\'ll', '\g<1> will'),
(r'(\w+)n\'t', '\g<1> not'),
(r'(\w+)\'ve', '\g<1> have'),
(r'(\w+)\'s', '\g<1> is'),
(r'(\w+)\re', '\g<1> are'),
(r'(\w+)\'d', '\g<1> would')]
class RegexReplacer(object):
    def __init__(self, patterns=replacement_patterns):
         self.patterns = [(re.compile(regex), repl) for (regex, repl)in patterns]
    def replace(self, text):
         s = text
         for (pattern, repl) in self.patterns:
              (s, count) = re.subn(pattern, repl, s)
         return s
replace = RegexReplacer()
```

:[8] In

```
#Exercise 2: Demonstrate how can use the source code above to replace the sentences below:
Sentence='''We'll see how to replace words using regular
expressions such doesn't, can't and so on'''
print(replacer.replace(Sentence))
```

We will see how to replace words using regular expressions such does not, cannot and so on

:[9] In

```
#Dealing with repeating characters
class RepeatReplacer(object):
    def __init__(self):
        self.repeat_regexp = re.compile(r'(\w*)(\w)\2(\w*)')
        self.repl = r' \ 1 \ 2 \ 3'
    def replace(self, word):
        repl_word = self.repeat_regexp.sub(self.repl, word)
        if repl_word != word:
            return self.replace(repl_word)
        else:
            return repl_word
repeat = RepeatReplacer()
```

:[12] In

```
#Exercise 3: Get a sentence from the user. If the sentence contains any repeating characte
Sentence = "We likkkkke python"
print(repeat.replace(Sentence))
```

We like python

:[] In