regex-expression-assignment-3

August 11, 2024

```
[]:
```

1 Q.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).

```
[1]: import re
string = "Virat"

pattern = r'^[a-z,A-Z0-9]+$'

x = re.search(pattern,string)

print(x)
```

<re.Match object; span=(0, 5), match='Virat'>

2 Q.2). Write a RegEx pattern that matches a string that has an a followed by zero or more b's

```
[2]: string = "abbb"

pattern = r'ab*'

x = re.search(pattern, string)

print(x)
```

<re.Match object; span=(0, 4), match='abbb'>

3 Q.3). Write a RegEx pattern that matches a string that has an a followed by one or more b's

```
[3]: string = "abbb"

pattern = r'ab+'

x = re.search(pattern, string)

print(x)

<re.Match object; span=(0, 4), match='abbb'>
```

4 Q.4). Write a RegEx pattern that matches a string that has an a followed by zero or one 'b'

```
[4]: string = "ac"

pattern = r'ab?'

x = re.search(pattern, string)

print(x)
```

<re.Match object; span=(0, 1), match='a'>

5 Q.5). Write a RegEx pattern in python program that matches a string that has an a followed by three 'b'.

```
[5]: string = "abbb"

pattern = r'ab{3}'

x = re.search(pattern, string)

print(x)
```

<re.Match object; span=(0, 4), match='abbb'>

6 Q.6). Write a RegEx pattern in python program that matches a string that has an a followed by two to three 'b'.

```
[6]: string = "abbb"

pattern = r'ab{2,3}'

x = re.search(pattern,string)

print(x)

<re.Match object; span=(0, 4), match='abbb'>
```

7 Q.7). Write a Python program that matches a string that has an 'a' followed by anything, ending in 'b'.

```
[7]: string = "a1234tb"

pattern = r'[aA].*[bB]$'

x = re.search(pattern, string)

print(x)
```

<re.Match object; span=(0, 7), match='a1234tb'>

8 Q.8). Write a RegEx pattern in python program that matches a word at the beginning of a string.

```
[8]: target_string = 'Virat is a cricket player 1998 who was born November 5,1968 '
resuilt = re.search(r"^[a-zA-Z]",target_string)
print(resuilt)
```

<re.Match object; span=(0, 1), match='V'>

9 Q.9). Write a RegEx pattern in python program that matches a word at the end of a string.

```
[9]: target_string = 'Virat is a cricket player 1998 who was born Novenmber 5,1968

→Virat'

resuilt = re.search(r"[a-zA-Z]$",target_string)
```

```
print(resuilt)
```

<re.Match object; span=(65, 66), match='t'>

[]:

10 Q.10). Write a RegEx pattern in python program to find all words that are 4 digits long in a string.

Sample text- '01 0132 231875 1458 301 2725.' Expected output- ['0132', '1458', '2725']

[10]:	text = "01 0132 231875 1458 301 2725."
	<pre>x =re.findall(r'\b\d{4}\b',text) print(x)</pre>
	['0132', '1458', '2725']
[]:	
[]:	
[]:	