

Q1. 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)

Ans-

```
import re
```

```
string2 = "Google was officially launched in 1998 by Larry Page and Sergey Brin to market Google Search, which has become the most used web-based search engine"
```

```
pattern2 = re.compile('[^0-9A-Za-z]+')
```

```
result2 = pattern2.search(string2)
```

```
if result2:
```

```
    print('matched')
```

```
else:
```

```
    print('Notmatched')
```

Q2. Write a RegEx pattern that matches a string that has an a followed by zero or more b's.

Ans-

```
string3 = "Google was officially launched in 1998 by Larry Page and Sergey Brin to market Google Search, which has become the most used web-based search engine"
```

```
pattern3 = re.compile('ab*?')
```

```
result3= pattern3.search(string3)
```

```
if result3:
```

```
    print('match')
```

```
else:
```

```
    print('not_match')
```

Q3. Write a RegEx pattern that matches a string that has an a followed by one or more b's

Ans -string4="India is a Beautiful Country"

```
pattern4 = re.compile('ab+?')
```

```
result4 = pattern4.search(string4)
```

```
if result4:
```

```
    print('True')
```

```
else:
```

```
    print('False')
```

Q4. Write a RegEx pattern that matches a string that has an a followed by zero or one 'b'

Ans:-

```
string5="Page's web crawler began exploring the web in March 1996, with Page's own Stanford home page serving as the only starting point"
```

```
pattern5 = re.compile('ab??')
```

```
result5 = pattern4.search(string5)
```

```
if result5:
```

```
    print('True')
```

```
else:
```

```
    print('False')
```

Q5. Write a RegEx pattern in python program that matches a string that has an a followed by three 'b'.

Ans. –

```
string6="Abbbs is a new outlet of barbeque and abbbs is located in Mumbai"
pattern6=re.compile('ab{3}?')
result6=pattern6.search(string6)
if result6:
    print('True')
else:
    print('False')
```

Q6. Write a RegEx pattern in python program that matches a string that has an a followed by two to three 'b'.

Ans.-

```
string7="Abs is a new outlet of barbeque and abs is located in Mumbai"
pattern7=re.compile('ab{2,3}?')
result7=pattern7.search(string7)
if result7:
    print('True')
else:
    print('False')
```

Q7. Write a Python program that matches a string that has an 'a' followed by anything, ending in 'b'.

Ans.-

```
string8="They were completely overabsorbed in each other"
pattern8=re.compile('a.*?b$')
result8=pattern8.search(string8)
if result8:
    print('True')
else:
    print('False')
```

Q8. Write a RegEx pattern in python program that matches a word at the beginning of a string.

And.-

```
string9="The Avengers premiered at the El Capitan Theatre in Los Angeles on April 11, 2012"
pattern9=re.match('^w+', string9)
if pattern9:
    print('True')
else:
    print('False')
```

Q9. Write a RegEx pattern in python program that matches a word at the end of a string.

Ans. –

```
string10="The Avengers become divided over how to approach Loki and the revelation that  
S.H.I.E.L.D."
```

```
pattern10=re.search('\b\w+[.!?,:;]*$', string10)
```

```
if pattern10:
```

```
    print('True')
```

```
else:
```

```
    print('False')
```

Q10. 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']

Ans.-

```
string11='01 0132 231875 1458 301 2725'
```

```
Result11=Result11=re.findall('\d{4}', string11)
```

```
Result11
```