Regular Expression Practice Questions

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).

Ans –

```python
pattern = "[a-zA-Z0-9]"
input_string = input("Enter the string ")

if is_valid_string(input_string):
    print("Valid String")
else:
    print("In_Valid String")
```

```
Enter the string Today virat KOHLI Played well. He scored 100 only 76 Balls
Valid String
```

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

Ans -

```python
import re
def text_match(text):
        patterns = '^a(b*)$'
        if re.search(patterns,  text):
                return ' match'
        else:
                return('Not matched')
print(text_match("ac"))
print(text_match("abc"))
print(text_match("a"))
print(text_match("ab"))
print(text_match("abb"))
```

```
Not matched
Not matched
 match
 match
 match
```

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

Ans -

```
import re
def text_match(text):
        patterns = 'ab+?'
        if re.search(patterns,  text):
                return ' match'
        else:
                return('Not matched')
print(text_match("ac"))
print(text_match("abc"))
print(text_match("a"))
print(text_match("ab"))
print(text_match("abb"))
```

```
Not matched
 match
Not matched
 match
 match
```

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

Ans –

```
n [146]: import re
         def text_match(text):
                 patterns = 'ab?'
                 if re.search(patterns,  text):
                         return ' match'
                 else:
                         return('Not matched')
         print(text_match("ac"))
         print(text_match("abc"))
         print(text_match("abbbc"))
         print(text_match("aaabbbcc"))
         print(text_match("abbbb"))
         print(text_match("c"))
```

```
 match
 match
 match
 match
 match
Not matched
```

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

Ans-

```
import re
def text_match(text):
        patterns = 'ab{3}'
        if re.search(patterns,  text):
                return ' match'
        else:
                return('Not matched')
print(text_match("ac"))
print(text_match("abc"))
print(text_match("abbbc"))
print(text_match("aaabbbcc"))
print(text_match("abbbb"))
print(text_match("c"))

Not matched
Not matched
 match
 match
 match
Not matched
```

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

```
import re
def text_match(text):
        patterns = 'ab{2,3}'
        if re.search(patterns,  text):
                return ' match'
        else:
                return('Not matched')
print(text_match("ac"))
print(text_match("abc"))
print(text_match("abbbc"))
print(text_match("aaabbbcc"))
print(text_match("abbbb"))
print(text_match("abbc"))

Not matched
Not matched
 match
 match
 match
 match
```

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

Ans -

```
import re
def text_match(text):
        patterns = 'a.*?b$'
        if re.search(patterns,  text):
                return ' match'
        else:
                return('Not matched')
print(text_match("ac"))
print(text_match("abc"))
print(text_match("abbbc"))
print(text_match("aaabbbcc"))
print(text_match("abbbb"))
print(text_match("abbc"))
```

```
Not matched
Not matched
Not matched
Not matched
 match
Not matched
```

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

Ans-

```
import re
def text_match(text):
        patterns = '^\w+'
        if re.search(patterns,  text):
                return ' match'
        else:
                return('Not matched')
print(text_match("Today virat KOHLI Played well. He scored 100 only 76 Balls"))
print(text_match(" Today virat KOHLI Played well. He scored 100 only 76 Balls"))
```

```
 match
Not matched
```

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

Ans-

```
: import re
  def text_match(text):
          patterns = '\w+\S*$'
          if re.search(patterns,  text):
                  return ' match'
          else:
                  return('Not matched')
  print(text_match("Today virat KOHLI Played well. He scored 100 only 76 Balls"))
  print(text_match(" Today virat KOHLI Played well. He scored 100 only 76 Balls "))

  match
  Not matched
```

Question 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']

Ans-

```
: import re
  test = '01 0132 231875 1458 301 2725'
  result = re.findall(r"\b\w{4}\b",test)
  print("Match Object:",result)

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