**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).

Import re

def strg(x):

pattern = re.compile('^[a-zA-Z0-9]+$')

if pattern.match(x):

return True

else:

return False

print(strg("Hello123")) #True

print(strg("Hello ")) #False

print(strg("&%%&")) #False

print(strg("xyz\*")) #False

print(strg("Hello ")) #False

print(strg("&%%&")) #False

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

import re

test\_strings = ["ay", "n12a", "a0", "b"]

pattern = r'ab\*'

for test\_str in test\_strings:

if re.search(pattern, test\_str):

print(f"String '{test\_str}' matches.")

else:

print(f"String '{test\_str}' does not match.")

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

import re

test\_strings = ["ay", "ab", "a0", "b"]

pattern = r'ab+'

for test\_str in test\_strings:

if re.search(pattern, test\_str):

print(f"String '{test\_str}' matches.")

else:

print(f"String '{test\_str}' does not match.")

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

import re

test\_strings = ["ay", "ab", "a0", "b"]

pattern = r'a[b]?'

for test\_str in test\_strings:

if re.search(pattern, test\_str):

print(f"String '{test\_str}' matches.")

else:

print(f"String '{test\_str}' does not match.")

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

import re

test\_strings = ["ab","abbb"]

pattern = r'ab{3}'

def match\_pattern(strings):

for string in strings:

if re.search(pattern, string):

print(f"Matched: '{string}'")

else:

print(f"No match: '{string}'")

match\_pattern(test\_strings)

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

test\_strings = ["ab","abb","abbb","a followed by bbb","not matching pattern"]

pattern = r'ab{2,3}'

def matching(x):

for string in x:

if re.search(pattern, string):

print(f"Matched: '{string}'")

else:

print(f"No match: '{string}'")

match\_pattern(test\_strings)

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

import re

sample = ["acb","a123","abbbb"]

pattern = r'a.\*b$'

def match\_pattern(x):

for str in x:

if re.search(pattern, str):

print(f"Matched: '{str}'")

else:

print(f"No match: '{str}'")

match\_pattern(sample)

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

import re

Sampletxt="Space is huge and formed with various gases in molten form"

pattern = r'^\w+'

x=re.search(r"\w+", Sampletxt)

print (x)

def matchedword(str):

for x in str:

match= re.search(pattern,x)

if match:

print("Matches--", x)

else:

print("does not match", x)

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

import re

Sampletxt="Space is huge and formed with varoious gases in molten form"

pattern = r'\w+$'

x=re.search(r"\w+$", Sampletxt)

print (x)

def matchedword(str):

for x in str:

match= re.search(pattern,x)

if match:

print("Matches--", x)

else:

print("does not match", x)

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']

sample\_text= '01 0132 231875 1458 301 2725.'

result=re.findall(r"\b\d{4}\b",sample\_text)

print(result)