**Regular Expression Practice Questions**

**Batch Number- DS2312**

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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. 1 import re

def contains\_only\_allowed\_characters(text):

pattern = r'^[a-zA-Z0-9]+$'

return bool(re.match(pattern, text))

sample\_text = 'AbC123'

result = contains\_only\_allowed\_characters(sample\_text)

print(result)

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

Ans. 2 import re

def match\_a\_followed\_by\_zero\_or\_more\_b(text):

pattern = r'ab\*'

match = re.search(pattern, text)

return match.group() if match else None

sample\_text = 'This is an example string with a and abbb.'

result = match\_a\_followed\_by\_zero\_or\_more\_b(sample\_text)

print(result)

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

Ans. 3 import re

def match\_a\_followed\_by\_one\_or\_more\_b(text):

pattern = r'ab+'

match = re.search(pattern, text)

return match.group() if match else None

sample\_text = 'This is an example string with ab and abbb.'

result = match\_a\_followed\_by\_one\_or\_more\_b(sample\_text)

print(result)

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

Ans.4 import re

def match\_a\_followed\_by\_zero\_or\_one\_b(text):

pattern = r'ab?'

match = re.search(pattern, text)

return match.group() if match else None

sample\_text = 'This is an example string with a and ab.'

result = match\_a\_followed\_by\_zero\_or\_one\_b(sample\_text)

print(result)

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

Ans. 5 import re

def match\_a\_followed\_by\_three\_b(text):

pattern = r'a(b{3})'

match = re.search(pattern, text)

return match.group() if match else None

sample\_text = 'This is an example string with abb and abbb.'

result = match\_a\_followed\_by\_three\_b(sample\_text)

print(result)

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

Ans.6 import re

def match\_a\_followed\_by\_b(text):

pattern = r'a(bb|bbb)'

match = re.search(pattern, text)

return match.group() if match else None

sample\_text = 'This is an example string with an abb and abbb.'

result = match\_a\_followed\_by\_b(sample\_text)

print(result)

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

Ans.7 import re

def match\_a\_followed\_by\_b(text):

pattern = r'a.\*b$'

match = re.search(pattern, text)

return match.group() if match else None

sample\_text = 'This is an example string with an apple and a crab.'

result = match\_a\_followed\_by\_b(sample\_text)

print(result)

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

Ans.8 import re

def match\_word\_at\_beginning(text):

pattern = r'^\b\w+\b'

match = re.search(pattern, text)

return match.group() if match else None

sample\_text = 'This is a sample sentence.'

result = match\_word\_at\_beginning(sample\_text)

print(result)

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

Ans. 9 import re

def match\_word\_at\_end(text):

pattern = r'\b\w+\b$'

match = re.search(pattern, text)

return match.group() if match else None

sample\_text = 'This is a sample sentence.'

result = match\_word\_at\_end(sample\_text)

print(result)

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. 10 import re

def find\_four\_digit\_words(text):

pattern = r'\b\d{4}\b'

matches = re.findall(pattern, text)

return matches

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

result = find\_four\_digit\_words(sample\_text)

print(result)