**REGULAR EXPRESSION**

#To convert a date of yyyy-mm-dd format to dd-mm-yyyy format.

import re

def change\_date\_format(dt):

return re.sub(r'(\d{4})-(\d{1,2})-(\d{1,2})', '\\3-\\2-\\1', dt)

dt1 = input()

print("Original date in YYY-MM-DD Format: ",dt1)

print("New date in DD-MM-YYYY Format: ",change\_date\_format(dt1))

OUTPUT:

200102-02-01

Original date in YYY-MM-DD Format: 0102-02-01

New date in DD-MM-YYYY Format: 01-02-0102

#Detect floating point number

import re

for i in range(int(input())):

print(bool(re.match(r'[-+]?[0-9]\*[.][0-9]+$', input())))

OUTPUT:

3

1.0000

True

2.d

False

daasda

False

#we can split the number whe it gets , .

import re

s = input()

args = re.split("[.,]",s)

for x in args:

if x:

print(x)

OUTPUT:

100,200,3000.400

100

200

3000

400

#return the indices of the start and end of the substring matched by the group.

S = input()

k = input()

import re

pattern = re.compile(k)

r = pattern.search(S)

if not r: print("(-1, -1)")

while r:

print("({0}, {1})".format(r.start(), r.end() - 1))

r = pattern.search(S,r.start() + 1)

OUTPUT:

Aabcdaaa

aa

(0, 1)

(5, 6)

(6, 7)

#substitution of

&&->and

||->or

for i in range(int(input())):

line = input()

while ' && ' in line or ' || ' in line:

line = line.replace(" && ", " and ").replace(" || ", " or ")

print(line)

OUTPUT:

1

x+3 and x-3 || x-4

x+3 and x-3 or x-4

#search a pattern in the string where the pattern occurs in the given string

import re

pattern = input()

text = input()

match = re.search(pattern, text)

s = match.start()

e = match.end()

print('Found "%s" in "%s" from %d to %d ' % \

(match.re.pattern, match.string, s, e))

OUTPUT:

python

most flexible language for me to work is python

Found "python" in "most flexible language for me to work is python" from 41 to 47

#matches a word at the end of string, with optional punctuation.

import re

text=input()

def text\_match(text):

patterns = '\w+\S\*$'

if re.search(patterns, text):

return 'Found a match!'

else:

return('Not matched!')

print(text\_match(text))

OUTPUT:

1.iam so excited!

Found a match!

2.the brown

Not matched!

# To check for a number at the end of a string

import re

string=input()

def end\_num(string):

text = re.compile(r".\*[0-9]$")

if text.match(string):

return True

else:

return False

print(end\_num(string))

OUTPUT:

Iam going to school at the age of 3

True

# to separate and print the numbers of a given string

import re

text =input()

result = re.split("\D+", text)

for element in result:

print(element)

OUTPUT:

my dob is 10-07-1999 and mu y rnd dob is 18-10-1998

10

07

1999

18

10

1998

#to replace all occurrences of space, comma, or dot with a colon

import re

text =input()

print(re.sub("[ ,.]", ":", text))

OUTPUT:

she is so beautiful.she is va ery good,at heart.she is very very....intelligent

she:is:so:beautiful:she:is:very:good:at:heart:she:is:very:very::::intelligent