

Regular Expression

Regular Expression: Used to search and match the sequence of characters in strings and numbers

- 1) findall(): Return's all the string that matches the sequence return type is an list.
- 2) search(): Return the object if string is matched.
- 3) split(): Will divide the string based on the sequence
- 4) sub(): Will replace the character with new character.

[] ==> a set of characters

. ==> any character except newline

^ ==> starts with

& ==> ends with

* ==> zero or more occurrence

+ ==> one or more occurrence

{ } ==> exactly the specified number of occurrence

| ==> or

? ==> Zero or one occurrence

^ ==> start with

\$ ==> ends with

\d ==> digit

\D ==> Not digit

\s ==> space

\w ==> word(a,b,c,A,B,C,0-9,underscore)

```
str1 = "Python Programming"
name = re.search("[A-Za-z]* [A-Za-z]*", str1)
print(name)

str1 = "Pyhton"
name = re.search("[A-Za-z]+", str1)
print(name)

str1 = "500091910@stu.upes.ac.in"
name = re.search("[0-9]+[@][a-z]+[.][a-z]+[.][a-z]+[.][a-z]+", str1)
print(name)

str1 = "fy12"
name = re.search("[a-z]*[0-9]*", str1)
print(name)

str1 = "python programming"
name = re.search('programming$', str1)
print(name)
```

Regular Expression

```
str1 = 'hitendrasisodia18@gamil.com'
name = re.search('[A-Za-z0-9]+@[a-z]+[.][a-z]+',str1)
print(name)

str1 = '500091910@ddn.upes.ac.in'
name = re.search('[0-9]+@[a-z]+[.][a-z][.][a-z][.][a-z]+',str1)
print(str1)

name1 = re.search('[0-9]{9}',str1)
print(name1)

str1 = '+91-9460939580'
name = re.search('[+][0-9]{2}[-][0-9]{10}',str1)
print(name)

str1 = '1234-1234-1234-1234'
name = re.search('[0-9]{4}[-]+[0-9]{4}[-][0-9]{4}[-][0-9]{4}',str1)
print(name)
str1 = "py12"
name = re.search('[a-z]{2}[0-9]{2}',str1)
print(name)

name = re.search('\D{2}\d{2}',str1)
print(name)

str1 = 'FIFA2021 Q1'
name = re.search('FIFA[0-9]{4} Q[0-9]{1}',str1)
print(name)

str1 = '+101-1234567890'
name = re.search('[+][0-9]{2,3}[-][0-9]{10}',str1)
print(name)

str1 = 'Python Programming'
name = re.search('[A-Za-z].+',str1)
print(name)

str1 = 'Python programming'
name = re.search('Py.*',str1)
print(name)
```