Ch :-3 Regular Expression ¶

In [1]:
```
import re
txt = "The rain in Spain"
x = re.findall("ai",txt)
print(x)
```

```
['ai', 'ai']
```

In [2]:
```
import re
txt = "The rain in Spain"
x = re.findall("rai",txt)
print(x)
```

```
['rai']
```

In [3]:
```
import re
txt = "The rain in Spain"
x = re.findall("rain",txt)
print(x)
```

```
['rain']
```

In [4]:
```
import re
txt = "The rain in Spain"
x = re.findall("airn",txt)
print(x)
```

```
[]
```

In [5]:
```
import re
txt = "The rain in Spain"
x = re.findall("[arn]",txt)
print(x)
```

```
['r', 'a', 'n', 'n', 'a', 'n']
```

In [6]:
```
import re
txt = "The rain in Spain"
x = re.findall("[arn][arn]",txt)
print(x)
```

```
['ra']
```

In [7]:
```
import re
txt = "The rain in Spain"
x = re.findall("[arin][arin][arin]",txt)
print(x)
```

```
['rai', 'ain']
```

In [8]:
```
import re
txt = "The rain in Spain"
x = re.findall("[arin][arin][arin][arin]",txt)
print(x)
```

```
['rain']
```

In [9]:
```
import re
txt = "The rain in Srain"
x = re.findall("[arin][arin][arin][arin]",txt)
print(x)
```

```
['rain', 'rain']
```

In [10]:
```
import re
txt = "The rain in Spain"
x = re.search("\s",txt)
print(x)
```

```
<re.Match object; span=(3, 4), match=' '>
```

In [11]:
```
import re
txt = "The rain in Spain"
x = re.search("\w",txt)
print(x)
```

```
<re.Match object; span=(0, 1), match='T'>
```

In [12]:
```
import re
txt = "The rain in Spain"
x = re.search("[a-n][a-n][a-n]",txt)
print(x)
```

```
<re.Match object; span=(5, 8), match='ain'>
```

In [13]:
```
import re
txt = "The rain in Spain"
x = re.search("[a-n][a-n][a-n]",txt)
print(x.start())
```

```
5
```

In [14]:
```
import re
txt = "The rain in Spain"
x = re.search("rain",txt)
print(x)
```

```
<re.Match object; span=(4, 8), match='rain'>
```

In [15]:
```
import re
txt = "The rain in Spain"
x = re.search("portugal",txt)
print(x) # None
```

```
None
```

In [16]:
```
import re
txt = "The rain in Spain"
x = re.search("portugal",txt)
print(x.start())
```

```
---------------------------------------------------------------------------
AttributeError                            Traceback (most recent call last)
<ipython-input-16-d8db1463e685> in <module>
      2 txt = "The rain in Spain"
      3 x = re.search("portugal",txt)
----> 4 print(x.start())

AttributeError: 'NoneType' object has no attribute 'start'
```

In [17]:
```
import re
txt = "The rain in Spain"
x = re.split("\s",txt)
print(x)
```

```
['The', 'rain', 'in', 'Spain']
```

In [18]:
```
import re
txt = "The rain in Spain"
x = re.split("\s",txt,1) # only one space to split because args give 1.
print(x)
```

```
['The', 'rain in Spain']
```

In [19]:
```
import re
txt = "The rain in Spain"
x = re.split("\s",txt,2)
print(x)
```

```
['The', 'rain', 'in Spain']
```

In [23]:
```
import re
txt = "The rain in Spain"
x = re.sub("\s","9",txt) # sub(substitute):this is replce of space to 9.
print(x)
```

```
The9rain9in9Spain
```

In [24]:
```
import re
txt = "The rain in Spain"
x = re.sub("\s","9",txt,1)
print(x)
```

```
The9rain in Spain
```

In [25]:
```
import re
txt = "The rain in Spain"
x = re.sub("\w","9",txt)
print(x)
```

```
999 9999 99 99999
```

In [26]:
```
import re
txt = "The rain in S8ain"
x = re.sub("\w","9",txt)
print(x)
```

```
999 9999 99 99999
```

In [28]:
```
import re
txt = "The rain in Spain"
x = re.sub("\W","9",txt)
print(x)
```

```
The9rain9in9Spain
```

In [34]:
```
import re
urls = """https://example.com/2024/23/30/article-title
          https://news.site.com/archives/2019/12/15/save-news
          https://blog.example.com/posts/2023/07/05/save-news
          https://website.com/2022/08/09"""
data = re.findall(r'/(\d{4})/(\d{2})/(\d{2})',urls)
data
```

Out[34]:
```
[('2024', '23', '30'),
 ('2019', '12', '15'),
 ('2023', '07', '05'),
 ('2022', '08', '09')]
```

In [ ]:
```

```