Regular Expression

- first we have to import regular expression package re
- re.methodname(pattern/pattern variable,string/string variable)

Methods in re

- search()
- match()
- findall()

In [3]:

```
#package-packagename.function name(value)
import math

math.sqrt(36)
```

Out[3]:

```
6.0
```

In [2]:

```
# square root-1/2-0.5
36**0.5
```

Out[2]:

```
6.0
```

In [9]:

```
#search ()-Returns a Match object if there is a match anywhere in the string
import re

print(re.search("A","HARSHA"))
print(re.search("pyt","APSSDC"))
```

```
<re.Match object; span=(1, 2), match='A'>
None
```

In [ ]:

```
import re

n = input()
print(re.search("@",n))
```

In [ ]:

```
#match()
import re

print(re.match("ss","apssdc"))
print(re.match("aps","apssdcaps"))
```

symbols in python

In [3]:

```
import re
print(re.search("^A","APSSDC"))

print(re.search("^AP","APSSDC"))
print(re.search("^AP","APSSDCDC"))
```

```
<re.Match object; span=(0, 1), match='A'>
<re.Match object; span=(0, 2), match='AP'>
<re.Match object; span=(0, 2), match='AP'>
```

In [7]:

```
# "$" symbol
print(re.search("c$","APSSDC"))
print(re.search("DC$","APSSDC"))
print(re.match("S$","APSSDC"))
```

```
None
<re.Match object; span=(4, 6), match='DC'>
None
```

In [6]:

```
# "*" symbol

print(re.search("A*","APSSDC"))
print(re.search("A*","PSSDC"))
print(re.search("A","PSSDC"))
```

```
<re.Match object; span=(0, 1), match='A'>
<re.Match object; span=(0, 0), match=''>
None
```

In [8]:

```
# "+" symbol

print(re.search("A+","AAAAPSSDC"))
print(re.search("A+","PSSDC"))
print(re.search("A+","APSSDC"))
```

```
<re.Match object; span=(0, 4), match='AAAA'>
None
<re.Match object; span=(0, 1), match='A'>
```

In [9]:

```
# {min,max}

print(re.search("A{1,5}","AAAAPSSDC"))
print(re.search("A{1,3}","PSSDC"))
print(re.search("A{1,1}","APSSDC"))
```

```
<re.Match object; span=(0, 4), match='AAAA'>
None
<re.Match object; span=(0, 1), match='A'>
```

In [13]:

```
# "[]"

print(re.search("[SV]","AAAAPSSDC"))
print(re.search("[TS]","PSSDC"))
print(re.match("[SA]","APSSDC"))
print(re.match("[DY]","APSSDC"))

```

```
<re.Match object; span=(5, 6), match='S'>
<re.Match object; span=(1, 2), match='S'>
<re.Match object; span=(0, 1), match='A'>
None
```

In [14]:

```
# "\d,\D,\S,\s"

print(re.search("\d","AA4755AAPSSDC"))
print(re.search("\d\d","P89088SSDC"))
print(re.match("\d\d","APSSDC"))
print(re.match("\d","459APSSDC"))



```

```
<re.Match object; span=(2, 3), match='4'>
<re.Match object; span=(1, 3), match='89'>
None
<re.Match object; span=(0, 1), match='4'>
```

In [ ]:

```
1
```