re.split(pattern, string, maxsplit=0, flags=0)

Split string by the occurrences of pattern. If capturing parentheses are used in pattern, then the text of all groups in the pattern are also returned as part of the resulting list. If maxsplit is nonzero, at most maxsplit splits occur, and the remainder of the string is returned as the final element of the list.

```
import re
def main():
    str1="python java;c++:php.C"
    l=re.split('[\s;:.]',str1)
    print(l)
    str2="python 4000 naresh"
    l=str2.split(" ")
    print(l)
    l=re.split('\s',str2,1)
    print(l)
main()
```

Output:

```
['python', 'java', 'c++', 'php', 'C']
['python', '4000', 'naresh']
['python', '4000 naresh']
>>>
```

https://www.hackerrank.com/challenges/validating-credit-card-number/problem

```
import re

for _ in range(int(input())):
    s = input()

    if re.match(r"^[456]([\d]{15}|[\d]{3}(-
[\d]{4}){3})$", s) and not re.search(r"([\d])\1\1\1", s.replace("-", "")):
        print("Valid")
    else:
        print("Invalid")
```

```
>>> import re
>>> str1="aa"
>>> m=re.search(r'a\1',str1)
>>> m=re.search(r'([a])\1',str1)
>>> print(m)
<re.Match object; span=(0, 2), match='aa'>
>>> str2="ab"
>>> m=re.search(r'([a])\1',str2)
>>> print(m)
None
>>> cardno="5133336789123456"
>>> m=re.search(r'([\d])\1\1\1',cardno)
>>> print(m)
<re.Match object; span=(2, 6), match='3333'>
>>>
```