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1 Lab. HTML file 다루기
 3
   1. urllib.request module 이용하기
      1)URL로 접속하여 HTML page 화면에 출력하기
 4
 5
       from urllib.request import urlopen
 6
 7
        url = 'https://www.python.org'
 8
        with urlopen(url) as f:
 9
          doc = f.read().decode()
          print(doc)
10
11
12
     2)URL로 접속하여 HTML page 파일로 저장하기
        from urllib.request import urlopen
13
14
15
        url = 'https://www.python.org'
16
        with urlopen(url) as f:
17
          doc = f.read().decode()
18
          with open('pythonhome.html', 'w') as h:
19
             h.writelines(doc)
20
21
        print('Save Successfully')
22
23
     3)Web image file로 저장하기
        from urllib.request import urlopen
24
25
26
        imgurl = 'https://www.python.org/static/img/python-logo@2x.png'
27
        imgname = imgurl.split('/')[-1]
28
       try:
29
          with urlopen(imgurl) as f:
30
             with open(imgname, 'wb') as h:
31
                img = f.read()
                h.write(img)
32
33
          print('Save Successfully.')
34
        except Exception as e:
35
          print(e)
36
37
   2. HTTPError를 이용하여 error 처리하기
38
     from urllib.request import urlopen
39
40
     from urllib.error import HTTPError
41
42
     def download(url):
        print('downloading:', url)
43
44
        try:
45
          html = urlopen(url).read().decode('utf-8')
        except HTTPError as e:
46
          print('Download error:', e.reason)
47
48
          html = None
49
        return html
50
51
```

```
52
      download('http://httpstat.us/500')
53
54
      Downloading: http://httpstat.us/500
      Download error: Internal Server Error
55
56
      download('http://www.samsung.com')
57
58
59
      Downloading: <a href="http://www.samsung.com">http://www.samsung.com</a>
      Download error: Forbidden
60
61
62
63
   3. requests module 이용하기
      1)Python HTTP for Humans'
64
65
      2)http://docs.python-requests.org/en/master/
      3)Install
66
67
        pip install requests
68
69
70
        import requests
71
        url = 'https://www.naver.com'
        naver = requests.get(url)
72
73
        print(naver.text)
74
75
      4)pprint module 이용하기
76
        -대량의 data를 보기 쉽게 표시해주는 표준 module
        -pprint(prettyprint)
77
78
79
          import requests
80
          import pprint
81
          url = 'https://www.naver.com'
          naver = requests.get(url)
82
          pprint.pprint(naver.text)
83
```