

```
from urllib.request import urlopen

url = "https://www.baidu.com"
resp = urlopen(url)

print(resp.read())
```

The output will be like:

```
C:\Users\lanacoda3\python.exe C:/User PycharmProject.py
b<IDOCType html><!-STATUS OK-->\n\n\n <html><head><meta http-equiv='Content-Type' content='text/html;charset=utf-8'><meta
http-equiv='X-UA-Compatible' content='IE=edge,chrome=1'><meta content='always' name='referrer' content='theme-color:' content='ffffff'><meta
name='description' content='\xe5\x85\xa8\xe7\x90\x83\xe9\xa2\x86\xe5\x85\x88\xe7\x9a\x84\xe4\xb4\xad\xe6\x96\x87\xe6\x90\x9c\xe7\xb4\xea2\xe5\xbc
\x95\xe6\x93\x8e\xe3\x80\x81\xe8\x87\xb4\xe5\x8a\x9b\xe4\xba\x8e\xe8\xae\xa9\xe7\xbd\x91\xe6\xb0\x91\xe6\x9b\xb4\xe4\xbe\xbf\xe6\x8d\xb7\xe5\x9c
\xb0\xe8\x8e\xb7\xe5\x8f\x96\xe4\xbf\xaa\xe6\x81\xaf\xef\xbc\x8c\xe6\x89\xbe\xe5\x88\xb0\xe6\x89\x80\xe6\xb1\x82\xe3\x80\x82\xe7\x99\xbe\xe5\xba
\xad\xe8\xbb\x85\xe8\xbf\x87\xe5\x8d\x83\xe4\xba\xbf\xe7\x9a\x84\xe6\x89\xad\xe6\x96\x87\xe7\xbd\x91\xe9\x81\x85\xe6\x95\x80\xe6\x8d\xae\xe5\xba
\x93\xef\xbc\x8c\xe5\x8f\xaf\xe4\xba\x85\xe7\x9e\xac\xe9\x97\x84\xe4\x8b\x8e\xe5\x88\xb0\xe7\x9b\x8d\xe5\x85\x83\xe7\x95\x84\xe6\x90\x9c\xe7\xb4
\xa2\xe7\xbb\x93\xe6\x9e\x9c\xe3\x80\x82"><Link rel="shortcut icon" href="/favicon.ico" type="image/x-icon" /><Link rel="search"
type="application/opensearchdescription+xml" href="/content-search.xml" title="\xe7\x99\xbe\xe5\xba\x90\xe6\x90\x9c\xe7\xb4\xa2" /><Link
rel="icon" sizes="any" mask href="//www.baidu.com/img/baidu_85beaf5496f221521eb75ba3eacbd87.svg"><link rel="dns-prefetch" href="//ds0.bdstatic
.com"/><link rel="dns-prefetch" href="//ds1.bdstatic.com"/><link rel="dns-prefetch" href="//ss1.bdstatic.com"/><link rel="dns-prefetch" href="//sp0.baidu
.com"/><link rel="dns-prefetch" href="//sp1.baidu.com"/><link rel="dns-prefetch" href="//sp2.baidu
.com"/><title>\xe7\x99\xbe\xe5\xba\x90\xe4\xb8\x80\xe4\xb8\x8b\xef\xbc\x8c\xe4\xbd\xa0\xe5\xb0\xb1\xe7\x9f\xa5\xe9\x81\x93</title><style
index="new1" type="text/css">#form .bdsug{top:39px}.bdsug{display:none;position:absolute;width:535px;background:#fff;border:1px solid
#ccc!important;overflow:hidden;border-shadow:1px 1px 3px #ededed;webkit-box-shadow:1px 1px 3px #ededed;moz-box-shadow:1px 1px 3px #ededed;
-o-box-shadow:1px 1px 3px #ededed}.bdsug li{width:519px;color:#000;font:14px arial;line-height:25px;padding:0 8px;position:relative;
cursor:default}.bdsug li.bdsug-s{background:#f0f0f0}.bdsug-store span,.bdsug-store b{color:#7A77C8}.bdsug-store-del{font-size:12px;color:#666;
text-decoration:underline;position:absolute;right:8px;top:0;cursor:pointer;display:none}.bdsug-s .bdsug-store-del{font-size:inline-block}
.bdsug-a{display:inline-block;border-bottom:1px solid #6e6e6f}.bdsug-a h3{line-height:14px;background:url(//www.baidu.com/img/sug_bd
.png?v=09816787.png) no-repeat left center;margin:6px 0 4px;font-size:12px;font-weight:400;color:#7B7B7B;padding-left:20px}.bdsug-a-l
p{font-size:14px;font-weight:700;padding-left:20px}#m .bdsug .bdsug-direct p{color:#00c;font-weight:700;line-height:34px;padding:0 8px;
margin-top:0;cursor:pointer;white-space:nowrap;overflow:hidden}#m .bdsug .bdsug-direct p img{width:16px;height:16px;margin:7px 6px 9px
vertical-align:middle}#m .bdsug .bdsug-direct p span{margin-left:8px}#form .bdsug .bdsug-direct{width:auto;padding:4px;border-bottom:1px solid
```

charset=utf-8 shows how to decode:

```
print (resp.read().decode('utf-8'))
```

```
C:\Users\anaconda3\python.exe C:\Users\PycharmProjects
<!DOCTYPE html><!--STATUS OK-->

<html><head><meta http-equiv="Content-Type" content="text/html; charset=utf-8"><meta http-equiv="X-UA-Compatible" content="IE=edge,
chrome=1"><meta content="always" name="referrer"><meta name="theme-color" content="#ffffff"><meta name="description" content="全球领先的中文搜索引擎、
致力于让网民更便捷地获取信息，找到所求。百度超过千亿的中文网页数据库，可以瞬间找到相关的搜索结果。"><link rel="shortcut icon" href="/favicon.ico"
type="image/x-icon" /><link rel="search" type="application/opensearchdescription+xml" href="/content-search.xml" title="百度搜索" /><link
rel="icon" sizes="any" mask href="//www.baidu.com/img/baidu_85baef5496f291521eb75ba38eacbd87.svg"><link rel="dns-prefetch" href="//dss0.bdstatic
.com"/><link rel="dns-prefetch" href="//dss1.bdstatic.com"/><link rel="dns-prefetch" href="//ss1.bdstatic.com"/><link rel="dns-prefetch"
href="//sp0.baidu.com"/><link rel="dns-prefetch" href="//sp1.baidu.com"/><link rel="dns-prefetch" href="//sp2.baidu.com"/><title>百度一下，你就知道
</title><style index="newi" type="text/css">#form .bdsug{top:39px}.bdsug{display:none;position:absolute;width:535px;background:#fff;border:1px
solid #ccc!important;overflow:hidden;box-shadow:1px 1px 3px #deded;webkit-box-shadow:1px 1px 3px #deded;moz-box-shadow:1px 1px 3px
#deded;-o-box-shadow:1px 1px 3px #deded}.bdsug li{width:519px;color:#000;font:14px arial;line-height:25px;padding:0 8px;position:relative;
cursor:default}.bdsug li.bdsug-s{background:#f0f0f0}.bdsug-store span,.bdsug-store b{color:#7A77C8}.bdsug-store-del{font-size:12px;color:#666;
text-decoration:underline;position:absolute;right:8px;top:0;color:pointer;display:none}.bdsug-s .bdsug-store-del{display:inline-block}
.bdsug-ala{display:inline-block;border-bottom:1px solid #e6e6e6}.bdsug-ala h3{line-height:14px;background:url("//www.baidu.com/img/sug_bd
.png?v=09816787.png") no-repeat left center;margin:6px 0 4px;font-size:12px;font-weight:400;color:#7B7B7B;padding-left:20px}.bdsug-ala
p{font-size:14px;font-weight:700;padding-left:20px}*m .bdsug .bdsug-direct p{color:#00c;font-weight:700;line-height:34px;padding:0 8px;
margin-top:0;color:pointer;white-space:nowrap;overflow:hidden}*m .bdsug .bdsug-direct p img{width:16px;height:16px;margin:7px 6px 9px
0;vertical-align:middle}*m .bdsug .bdsug-direct p span{margin-left:8px}*m .bdsug .bdsug-direct{width:auto;padding:0;border-bottom:1px solid
#f1f1f1}*m .bdsug .bdsug-direct p i{font-size:12px;line-height:100%;font-style:normal;font-weight:400;color:#fff;background-color:#2b99ff;
display:inline;text-align:center;padding:1px 5px;*padding:2px 5px 0;margin-left:8px;overflow:hidden}.bdsug .bdsug-pcDirect{color:#000;
font-size:14px;line-height:30px;height:30px;background-color:#f8f8f8}.bdsug .bdsug-pc-direct-tip{position:absolute;right:15px;top:80x;
```

We will find the numbers above will change into Chinese characters, this is because it was encoding with 'utf-8', if we want to see the exact character, we have to do decoding first.

Also, we can write the response into a file:

```

from urllib.request import urlopen

url = "https://www.baidu.com"
resp = urlopen(url)

#print(resp.read().decode('utf-8'))

with open("mybaidu.html", mode="w", encoding="utf-8") as f:
    f.write(resp.read().decode("utf-8"))
print("over!")

```

please remember to add

encoding="utf-8"

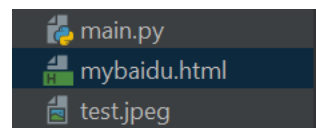
Otherwise, we will get:

```

C:\Users\...anaconda3\python.exe C:/Users.../PycharmProjects/...
Traceback (most recent call last):
  File "C:/Users.../PycharmProjects/...", line 9, in <module>
    f.write(resp.read().decode("utf-8"))
  File "C:/Users...anaconda3/lib/encodings/cp1252.py", line 19, in encode
    return codecs.charmap_encode(input,self.errors,encoding_table)[0]
UnicodeEncodeError: 'charmap' codec can't encode characters in position 297-357: character maps to <undefined>

Process finished with exit code 1

```



```

This document contains very long lines. Soft wraps were enabled to improve editor performance.
Hide notification Don't show again

1  <!DOCTYPE html><!--STATUS OK-->
2
3
4  <html><head><meta http-equiv="Content-Type" content="text/html; charset=utf-8"><meta http-equiv="X-UA-Compatible"
content="IE=edge,chrome=1"><meta content="always" name="referrer"><meta name="theme-color" content="#ffffff"><meta
name="description" content="全球领先的中文搜索引擎、致力于让网民更便捷地获取信息，找到所求。百度超过千亿的中文网页数据库，可以瞬间找到相关的搜索结
果。"><link rel="shortcut icon" href="/favicon.ico" type="image/x-icon" /><link rel="search"
type="application/opensearchdescription+xml" href="/content-search.xml" title="百度搜索" /><link rel="icon" sizes="any"
mask href="//www.baidu.com/img/baidu_85beaf5496f291521eb75ba38eacbd87.svg"><link rel="dns-prefetch" href="//dss0.bdstatic
.com"/><link rel="dns-prefetch" href="//dss1.bdstatic.com"/><link rel="dns-prefetch" href="//ss1.bdstatic.com"/><link
rel="dns-prefetch" href="//sp0.baidu.com"/><link rel="dns-prefetch" href="//sp1.baidu.com"/><link rel="dns-prefetch"
href="//sp2.baidu.com"/><title>百度一下，你就知道</title><style index="newi" type="text/css">#form .bdsug{top:39px}
.bdsug{display:none;position:absolute;width:535px;background:#fff;border:1px solid #ccc!important;overflow:hidden;
box-shadow:1px 1px 3px #eded;-webkit-box-shadow:1px 1px 3px #eded;-moz-box-shadow:1px 1px 3px #eded;
-o-box-shadow:1px 1px 3px #eded}.bdsug li{width:519px;color:#000;font:14px arial;line-height:25px;padding:0 8px;
position:relative;cursor:default}.bdsug li.bdsug-s{background:#f0f0f0}.bdsug-store span,.bdsug-store b{color:#7A77C8}
.bdsug-store-del{font-size:12px;color:#666;text-decoration:underline;position:absolute;right:8px;top:0;cursor:pointer;
display:none}.bdsug-s .bdsug-store-del{display:inline-block}.bdsug-alaf{display:inline-block;border-bottom:1px solid

```

After running the code, we will get a file named “mybaidu.html”, if we open it, it will be just like the original website (i.e. the url)



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百度热搜 > 换一换

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