

## Computers Network Lab

### Experiment 6

#### URL splitter/ Parser

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EA-1

➤ Aim:

To write a code to split a given URL into four components that are protocol, domain, port, path.

➤ Software used:

Online or offline python IDE.

➤ Procedure:

1. Take the input of URL.
2. Check if the protocol is specified else print 'NULL' or empty.
3. Then print the domain that is specified after the protocol,
4. Then check for the port which is after the colon, and it is also either specified or unspecified.
5. Finally check the path or the location.

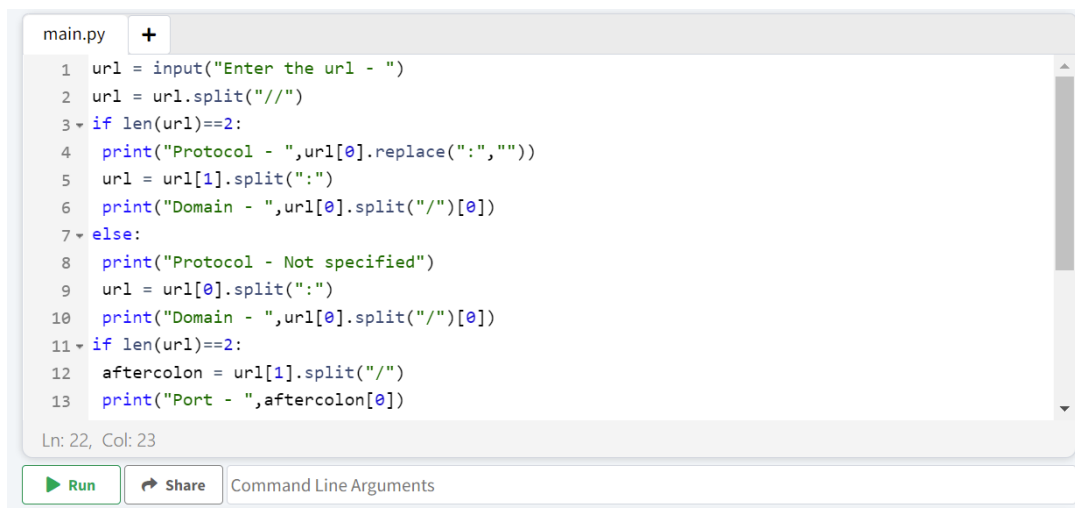
➤ Code:

```
//Abhimanyu Patwa
//19070123002
//CNL 6
url = input("Enter the url - ")
url = url.split("/")
if len(url)==2:
    print("Protocol - ",url[0].replace(":", ""))
    url = url[1].split(":")
    print("Domain - ",url[0].split("/")[0])
else:
    print("Protocol - Not specified")
    url = url[0].split(":")
    print("Domain - ",url[0].split("/")[0])
```

```

if len(url)==2:
    aftercolon = url[1].split("/")
    print("Port - ",aftercolon[0])
    del aftercolon[0]
    path = "/" .join(aftercolon)
    print("Path - ",path)
else:
    print("Port - Not specified")
    path = url[0].split("/")
    del path[0]
    path = "/" .join(path)
    print("Path - ",path)

```



main.py +


```

1 url = input("Enter the url - ")
2 url = url.split("//")
3 if len(url)==2:
4     print("Protocol - ",url[0].replace(":", ""))
5     url = url[1].split(":")
6     print("Domain - ",url[0].split("/")[0])
7 else:
8     print("Protocol - Not specified")
9     url = url[0].split(":")
10    print("Domain - ",url[0].split("/")[0])
11 if len(url)==2:
12     aftercolon = url[1].split("/")
13     print("Port - ",aftercolon[0])

```

Ln: 22, Col: 23

Run Share Command Line Arguments



main.py +

```

10    print("Domain - ",url[0].split("/")[0])
11 if len(url)==2:
12     aftercolon = url[1].split("/")
13     print("Port - ",aftercolon[0])
14     del aftercolon[0]
15     path = "/" .join(aftercolon)
16     print("Path - ",path)
17 else:
18     print("Port - Not specified")
19     path = url[0].split("/")
20     del path[0]
21     path = "/" .join(path)
22     print("Path - ",path)

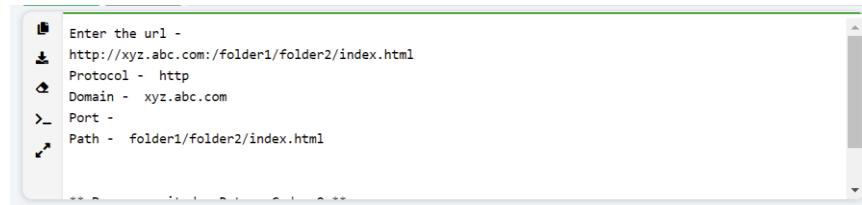
```

Ln: 22, Col: 23

➤ Outputs:



The protocol is not specified



The port is not specified

➤ Inferences:

A Universal Resource Locator ( URL) is a unique web address, and it represents the location of specific resource on the internet and has 4 components where :

- The protocol (also referred to as transfer protocol or scheme) in a URL determines how data is transferred between the host and a web browser (or client), usually given as HTTP.
- The domain which is the domain name and is always present and is the registered identification “string” (or word/phrase).
- The port address is not always mentioned or specified.
- The path which refers to the exact location of a page, post, file, or other asset.