

PRAKTIKUM ALGORITMA DAN PEMROGRAMAN

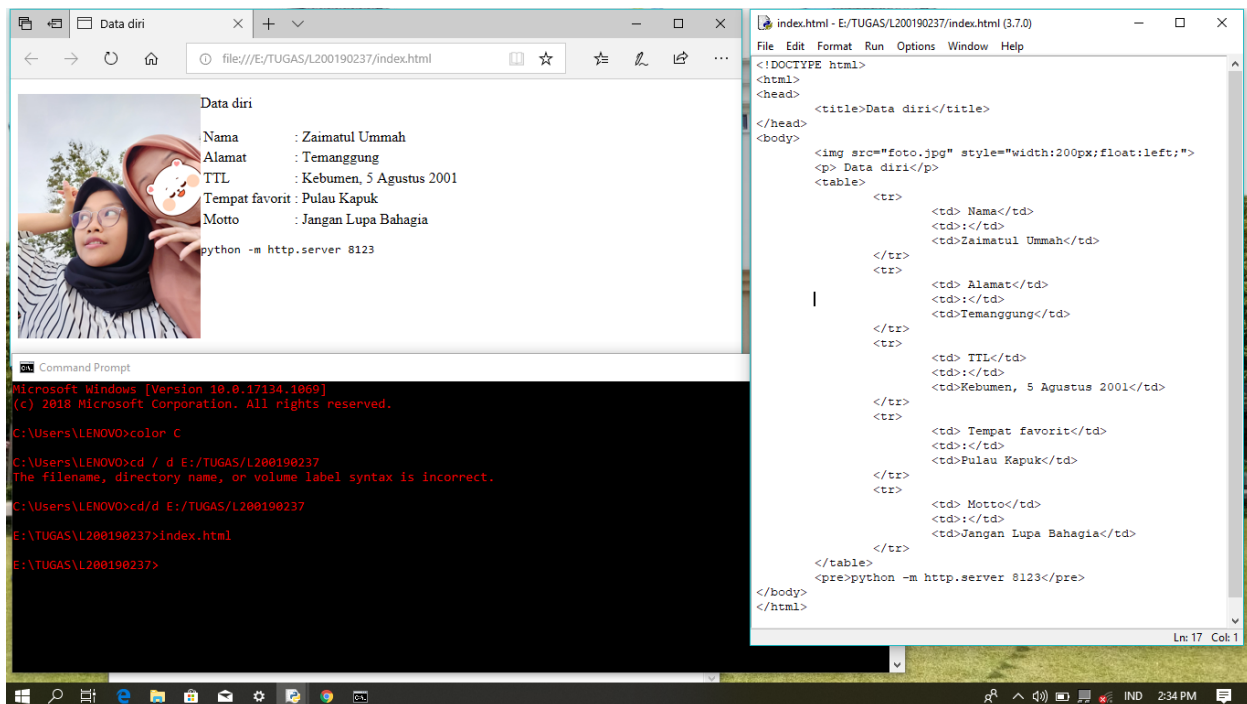
PRAKTIKUM 12: TOPIK LANJUTAN (LAYANAN WEB)

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Kelas: Informatika E

KEGIATAN 1. Membuat server web dengan SimpleHTTPRequestHandler



KEGIATAN 2. Membuat halaman web dengan CGIHTTPRequestHandler

```
Command Prompt - py -m http.server 8456 --cgi
Microsoft Windows [Version 10.0.17134.1069]
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C:\Users\LENOVO>color C

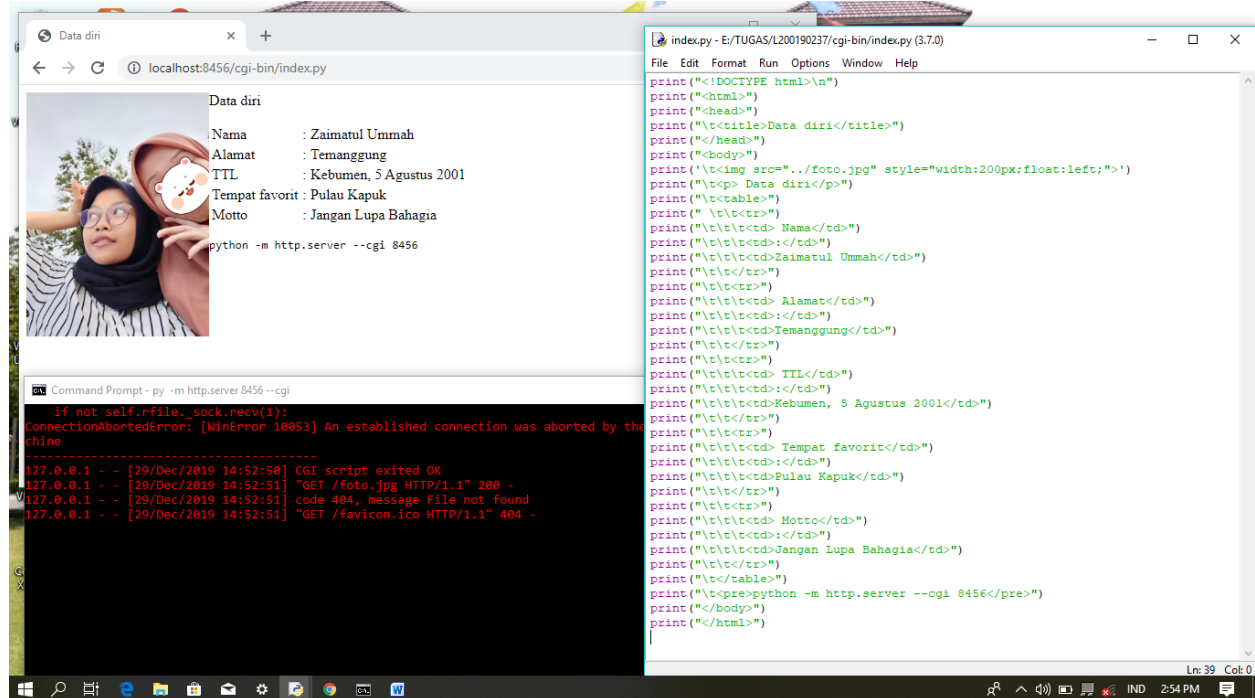
C:\Users\LENOVO>cd / d E:/TUGAS/L200190237
The filename, directory name, or volume label syntax is incorrect.

C:\Users\LENOVO>cd/d E:/TUGAS/L200190237

E:\TUGAS\L200190237>index.html

E:\TUGAS\L200190237>python -m http.server --cgi 8456
'python' is not recognized as an internal or external command,
operable program or batch file.

E:\TUGAS\L200190237>py -m http.server 8456 --cgi
Serving HTTP on 0.0.0.0 port 8456 (http://0.0.0.0:8456/) ...
127.0.0.1 - - [29/Dec/2019 14:48:23] "GET /cgi-bin/index.py HTTP/1.1" 200 -
127.0.0.1 - - [29/Dec/2019 14:52:43] "GET /cgi-bin/index.py HTTP/1.1" 200 -
127.0.0.1 - - [29/Dec/2019 14:52:49] command: C:\Users\LENOVO\AppData\Local\Programs\Python\Python37-32\python.exe -u E:\TUGAS\L200190237\cgi-bin\index.py ""
127.0.0.1 - - [29/Dec/2019 14:52:49] command: C:\Users\LENOVO\AppData\Local\Programs\Python\Python37-32\python.exe -u E:\TUGAS\L200190237\cgi-bin\index.py ""
-----
Exception happened during processing of request from ('127.0.0.1', 57381)
Traceback (most recent call last):
  File "C:\Users\LENOVO\AppData\Local\Programs\Python\Python37-32\lib\socketserver.py", line 647, in process_request_thread
    self.finish_request(request, client_address)
  File "C:\Users\LENOVO\AppData\Local\Programs\Python\Python37-32\lib\socketserver.py", line 357, in finish_request
    self.RequestHandlerClass(request, client_address, self)
  File "C:\Users\LENOVO\AppData\Local\Programs\Python\Python37-32\lib\http\server.py", line 646, in __init__
    super().__init__(*args, **kwargs)
  File "C:\Users\LENOVO\AppData\Local\Programs\Python\Python37-32\lib\socketserver.py", line 717, in __init__
    self.handle()
  File "C:\Users\LENOVO\AppData\Local\Programs\Python\Python37-32\lib\http\server.py", line 426, in handle
    self.handle_one_request()
  File "C:\Users\LENOVO\AppData\Local\Programs\Python\Python37-32\lib\http\server.py", line 414, in handle_one_request
    method()
  File "C:\Users\LENOVO\AppData\Local\Programs\Python\Python37-32\lib\http\server.py", line 650, in do_GET
    r = self.send_head()
  File "C:\Users\LENOVO\AppData\Local\Programs\Python\Python37-32\lib\http\server.py", line 988, in send_head
    return self.run_cgi()
  File "C:\Users\LENOVO\AppData\Local\Programs\Python\Python37-32\lib\http\server.py", line 1204, in run_cgi
    if not self.rfile.sock.recv(1):
ConnectionAbortedError: [WinError 10053] An established connection was aborted by the software in your host machine
```



The screenshot shows a web browser window displaying a personal data page. The page content is as follows:

Data diri

Nama : Zaimatul Ummah
Alamat : Temanggung
TTL : Kebumen, 5 Agustus 2001
Tempat favorit : Pulau Kapuk
Motto : Jangan Lupa Bahagia

Below the text, there is a small image of a person wearing a hijab and glasses, with a cartoon cat face overlaid on it.

The browser's address bar shows the URL: localhost:8456/cgi-bin/index.py

In the background, a command prompt window is visible, showing the output of the Python CGI script. It includes the same traceback as seen in the first screenshot, followed by the message: "CGI script exited OK".

KEGIATAN 3. Aplikasi web dengan CGI

The screenshot shows a web browser window displaying the output of a CGI script. The browser's address bar shows `localhost:8456/cgi-bin/tabung.py`. The page content includes a diagram of a cylinder and a table of data.

Data Tabung

Nama bangun :	Tabung
Dimensi :	3D
Rumus luas :	$2 \times \pi \times \text{rusuk} \times (\text{rusuk} + \text{tinggi})$
Rusuk :	7
Tinggi :	10
Luas :	747.6990515543707

The Python script (`tabung.py`) is shown in the background, using `print` statements to generate the HTML output. It includes a title, a table with the cylinder data, and a call to a function `luasstabung()`. The script also handles a 404 error for a missing image file.

```
print("<title>Data Tabung</title>")
print("</head>")
print("<body>")
print("<img src='../tabung.jpg' style='width:200px;height:200px;float:left;'>")
print("<p> Data Tabung</p>")
print("<table>")
print("<t><tr>")
print("<t><td> Nama bangun</td>")
print("<t><td>:</td>")
print("<t><td>Tabung</td>")
print("<t></tr>")
print("<t><tr>")
print("<t><td> Dimensi</td>")
print("<t><td>:</td>")
print("<t><td>3D</td>")
print("<t></tr>")
print("<t><tr>")
print("<t><td> Rumus luas</td>")
print("<t><td>:</td>")
print("<t><td>2 x pi x rusuk x (rusuk + tinggi)</td>")
print("<t></tr>")
print("<t><tr>")
print("<t><td> Rusuk</td>")
print("<t><td>:</td>")
print("<t><td>7</td>")
print("<t></tr>")
print("<t><tr>")
print("<t><td> Tinggi</td>")
print("<t><td>:</td>")
print("<t><td>10</td>")
print("<t></tr>")
print("<t><tr>")
print("<t><td> Luas</td>")
print("<t><td>:</td>")
print("<t><td>747.6990515543707</td>")
print("<t></tr>")
print("</table>")
print("</body>")
print("</html>")
```

The Command Prompt window shows the server running on `localhost:8456` and handling requests from `127.0.0.1`. It logs the execution of the CGI script and the retrieval of the image file.