

# EA872 Laboratório de Programação de Software Básico

## Atividade 8



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Entrega (limite): 27/09/2023, em aula.

### Atividades em aula:

- 1) A seguir se encontra o código fonte desenvolvido nesta atividade:

```
C/C++
#include <sys/types.h>
#include <netinet/in.h>
#include <sys/socket.h>
#include <string.h>
#include <arpa/inet.h>
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
#include <fcntl.h>

int main(int argc, char **argv) {
    int fd = open("index.html", O_CREAT | O_RDWR);
    int teste_while = 0;
    int porta = atoi(argv[2]);
    int soquete;
    struct sockaddr_in destino;
    char msg_ida[1024] = "GET / HTTP/1.1\r\nHost: example.org\r\n\r\n";
    char msg_volta[5000];
    soquete = socket(AF_INET, SOCK_STREAM, 0);
    destino.sin_family = AF_INET;
    destino.sin_port = htons(porta);
    inet_aton(argv[1], (struct in_addr*)&destino.sin_addr.s_addr);
    connect(soquete, (struct sockaddr*)&destino, sizeof(destino));
    write(soquete, msg_ida, strlen(msg_ida));
    sleep(1);
```

```

do {
    fcntl(soquete, F_SETFL, O_NONBLOCK);
    teste_while = read (soquete, msg_volta, 5000);
    write (1, msg_volta, strlen(msg_volta));

    } while (teste_while == 0);

    strcat(msg_volta, "\\0");
    char *token = strstr(msg_volta, "<!doctype html>");
    char *end = strstr(token, "</html>");
    printf(end);

    write(fd, token, strlen(token));

    close(soquete);
}

```

2) Um exemplo de uso em caso de sucesso é o seguinte:

Para a chamada do comando “./cliente 93.184.216.34 80”, temos no *terminal*

```

Unset
HTTP/1.1 200 OK
Age: 67657
Cache-Control: max-age=604800
Content-Type: text/html; charset=UTF-8
Date: Wed, 27 Sep 2023 20:19:01 GMT
Etag: "3147526947+gzip+ident"
Expires: Wed, 04 Oct 2023 20:19:01 GMT
Last-Modified: Thu, 17 Oct 2019 07:18:26 GMT
Server: ECS (mic/9AF5)
Vary: Accept-Encoding
X-Cache: HIT
Content-Length: 1256

<!doctype html>
<html>
<head>
    <title>Example Domain</title>

    <meta charset="utf-8" />
    <meta http-equiv="Content-type" content="text/html; charset=utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1" />
    <style type="text/css">
    body {
    background-color: #f0f0f2;
    margin: 0;

```

```

padding: 0;
font-family: -apple-system, system-ui, BlinkMacSystemFont, "Segoe UI",
"Open Sans", "Helvetica Neue", Helvetica, Arial, sans-serif;

}
div {
width: 600px;
margin: 5em auto;
padding: 2em;
background-color: #fdfdff;
border-radius: 0.5em;
box-shadow: 2px 3px 7px 2px rgba(0,0,0,0.02);
}
a:link, a:visited {
color: #38488f;
text-decoration: none;
}
}
@media (max-width: 700px) {
div {
margin: 0 auto;
width: auto;
}
}
}
</style>
</head>

<body>
<div>
<h1>Example Domain</h1>
<p>This domain is for use in illustrative examples in documents. You may use
this
domain in literature without prior coordination or asking for
permission.</p>
<p><a href="https://www.iana.org/domains/example">More
information...</a></p>
</div>
</body>
</html>
</html>

```

O arquivo index.html fica conforme se segue:

```

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HTTP/1.1 200 OK
Age: 67657
Cache-Control: max-age=604800

```

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  <style type="text/css">
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      background-color: #f0f0f2;
      margin: 0;
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      font-family: -apple-system, system-ui, BlinkMacSystemFont, "Segoe UI",
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    }
    div {
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</html>
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```

- 3) A seguir, temos um caso para o qual ocorre um erro de inexistência do endereço (“./cliente 10.10.1.1 80”), resposta do terminal:

```
Unset
Erro de conexão: No route to host
```

Para o caso em que ocorre erro por um servidor que não aceita conexão, temos o seguinte (“./cliente 93.184.216.34 45995”):

```
Unset
Erro de conexão: Connection timed out
```

- 4) Por fim, temos a seguinte amostra do site:

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#### Example Domain

This domain is for use in illustrative examples in documents. You may use this domain in literature without prior coordination or asking for permission.

[More information...](#)

