

CS 359: Assignment 8
Implement a Simple Application Proxy Server

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I have used the code that you have sent as the proxy server and changed my network settings to include port 8181 and used a free proxy IP address and port for second and third arguments. I am able to see connections in the output for the proxy server and requests to those ports in Wireshark

Screenshots:-

Changing proxy settings:

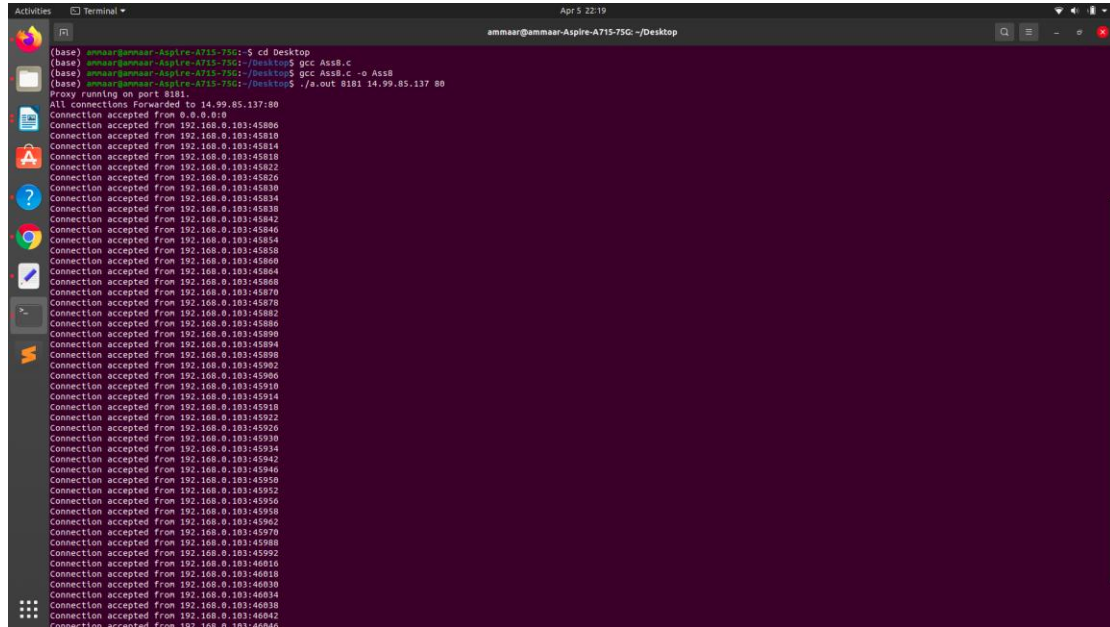
The screenshot shows the 'Connection Settings' dialog box with the following configuration:

- Configure Proxy Access to the Internet:**
 - ☐ No proxy
 - ☐ Auto-detect proxy settings for this network
 - ☐ Use system proxy settings
 - ☒ Manual proxy configuration
- HTTP Proxy:** 192.168.0.103, Port: 8181
- ☒ Also use this proxy for FTP and HTTPS
- HTTPS Proxy:** 192.168.0.103, Port: 8181
- FTP Proxy:** 192.168.0.103, Port: 8181
- SOCKS Host:** (empty), Port: 0
- ☐ SOCKS v4, ☒ SOCKS v5
- ☐ Automatic proxy configuration URL
- (empty),
- No proxy for:** (empty)
- Example: .mozilla.org, .net.nz, 192.168.1.0/24
- Connections to localhost, 127.0.0.1/8, and ::1 are never proxied.
- ☐ Do not prompt for authentication if password is saved
- ☐ Proxy DNS when using SOCKS v5
- ☐ Enable DNS over HTTPS
- Use Provider: Cloudflare (Default)
-

My ip address was 192.168.0.103

Terminal screenshot:

Here my filename was Ass8.c I have changed name to proxy.c while submitting



```
(base) ammar@ammar-Aspire-A715-75G1:~/Desktop$ cd Desktop
(base) ammar@ammar-Aspire-A715-75G1:~/Desktop$ gcc Ass8.c
(base) ammar@ammar-Aspire-A715-75G1:~/Desktop$ gcc Ass8.c -o Ass8
(base) ammar@ammar-Aspire-A715-75G1:~/Desktop$ ./a.out 8181 14.99.85.137 80
Proxy running on port 8181.
All connections Forwarded to 14.99.85.137:80
Connection accepted from 0.0.0.0:0
Connection accepted from 192.168.0.103:45806
Connection accepted from 192.168.0.103:45810
Connection accepted from 192.168.0.103:45814
Connection accepted from 192.168.0.103:45818
Connection accepted from 192.168.0.103:45822
Connection accepted from 192.168.0.103:45826
Connection accepted from 192.168.0.103:45830
Connection accepted from 192.168.0.103:45834
Connection accepted from 192.168.0.103:45838
Connection accepted from 192.168.0.103:45842
Connection accepted from 192.168.0.103:45846
Connection accepted from 192.168.0.103:45854
Connection accepted from 192.168.0.103:45858
Connection accepted from 192.168.0.103:45860
Connection accepted from 192.168.0.103:45864
Connection accepted from 192.168.0.103:45868
Connection accepted from 192.168.0.103:45870
Connection accepted from 192.168.0.103:45878
Connection accepted from 192.168.0.103:45882
Connection accepted from 192.168.0.103:45886
Connection accepted from 192.168.0.103:45890
Connection accepted from 192.168.0.103:45894
Connection accepted from 192.168.0.103:45898
Connection accepted from 192.168.0.103:45902
Connection accepted from 192.168.0.103:45906
Connection accepted from 192.168.0.103:45910
Connection accepted from 192.168.0.103:45914
Connection accepted from 192.168.0.103:45918
Connection accepted from 192.168.0.103:45922
Connection accepted from 192.168.0.103:45926
Connection accepted from 192.168.0.103:45930
Connection accepted from 192.168.0.103:45934
Connection accepted from 192.168.0.103:45942
Connection accepted from 192.168.0.103:45946
Connection accepted from 192.168.0.103:45950
Connection accepted from 192.168.0.103:45952
Connection accepted from 192.168.0.103:45956
Connection accepted from 192.168.0.103:45958
Connection accepted from 192.168.0.103:45962
Connection accepted from 192.168.0.103:45968
Connection accepted from 192.168.0.103:45972
Connection accepted from 192.168.0.103:46010
Connection accepted from 192.168.0.103:46018
Connection accepted from 192.168.0.103:46030
Connection accepted from 192.168.0.103:46034
Connection accepted from 192.168.0.103:46038
Connection accepted from 192.168.0.103:46042
Connection accepted from 192.168.0.103:46046
```

I have used some proxy ip address and port number (214.99.85.137 & 80)

Wireshark: