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miguel@miguel-Standard-PC-Q35-ICH9-2009: $ traceroute yahoo.com
traceroute to yahoo.com (74.6.143.26), 30 hops max, 60 byte packets
 1 fedora (192.168.122.1) 0.195 ms 0.178 ms 0.172 ms
 2 gateway (192.168.1.1) 8.314 ms 8.517 ms 8.525 ms
 3 035-149-177-128.res.spectrum.com (35.149.177.128) 8.544 ms 8.553 ms 8.580 ms
 4 * * *
 5 035-149-177-128.res.spectrum.com (35.149.177.128) 22.381 ms 23.737 ms 23.748 ms
 6 * 035-149-177-128.res.spectrum.com (35.149.177.128) 11.422 ms 16.873 ms
 7 035-149-177-128.res.spectrum.com (35.149.177.128) 27.327 ms 9.985 ms 15.910 ms
 8 lag-63.crr01yakmwa.netops.charter.com (96.34.106.22) 16.771 ms 16.734 ms 16.739 ms
 9 lag-805.bbr01yakmwa.netops.charter.com (96.34.108.182) 17.087 ms 21.306 ms 19.870 ms
10 lag-805.bbr01sttlwa.netops.charter.com (96.34.0.92) 20.022 ms 19.934 ms 19.970 ms
11 lag-801.prr01sttlwa.netops.charter.com (96.34.3.29) 19.771 ms 19.673 ms 19.581 ms
12 pat2.smp.yahoo.com (198.32.134.35) 21.129 ms 21.077 ms 22.778 ms
13 ae-5.pat1.gqb.yahoo.com (209.191.65.49) 17.880 ms ae-10.pat2.gqb.yahoo.com (209.191.65.51) 23.164 ms 23.055 ms
14 unknown.yahoo.com (209.191.65.102) 55.260 ms ae-7.pat1.dnx.yahoo.com (209.191.64.235) 57.385 ms ae-6.pat2.dnx.yahoo.com (209.191.64.239) 51.016 ms
15 209.191.68.0 (209.191.68.0) 72.084 ms 72.062 ms 72.053 ms
16 ae-8.pat1.bfz.yahoo.com (209.191.64.77) 89.883 ms 89.880 ms unknown.yahoo.com (209.191.65.139) 89.788 ms
17 et-2-1-1.pat2.bfz.yahoo.com (209.191.64.181) 96.055 ms 87.271 ms et-18-0-1.msrl.bfz.yahoo.com (72.30.223.29) 107.185 ms
18 et-0-0-0.msrl.bfz.yahoo.com (74.6.227.137) 84.370 ms et-1-1-0.clr1-a-gdc.bfz.yahoo.com (74.6.122.53) 106.170 ms et-18-0-0.clr1-a-gdc.bfz.yahoo.com (74.6.122.61) 89.186 ms
19 et-19-0-0.clr2-a-gdc.bfz.yahoo.com (74.6.122.45) 92.101 ms et-1-1-0.clr1-a-gdc.bfz.yahoo.com (74.6.122.53) 104.037 ms lo0.fab7-1-gdc.bfz.yahoo.com (74.6.123.236) 101.262 ms
20 usw1-1-lbb.bf2.yahoo.com (74.6.98.138) 105.629 ms lo0.fab1-1-gdc.bf2.yahoo.com (74.6.123.244) 107.933 ms lo0.fab7-1-gdc.bf2.yahoo.com (74.6.123.238) 99.623 ms
21 media-router-tp74.prod.media.vlp.bf1.yahoo.com (74.6.143.26) 101.152 ms 101.181 ms 99.603 ms
miguel@miguel-Standard-PC-Q35-ICH9-2009: $ ping localhost
PING localhost (127.0.0.1) 56(84) bytes of data:
 64 bytes from localhost (127.0.0.1): icmp_seq=1 ttl=64 time=0.021 ms
 64 bytes from localhost (127.0.0.1): icmp_seq=2 ttl=64 time=0.029 ms
 64 bytes from localhost (127.0.0.1): icmp_seq=3 ttl=64 time=0.030 ms
 64 bytes from localhost (127.0.0.1): icmp_seq=4 ttl=64 time=0.042 ms
 64 bytes from localhost (127.0.0.1): icmp_seq=5 ttl=64 time=0.030 ms
 64 bytes from localhost (127.0.0.1): icmp_seq=6 ttl=64 time=0.029 ms
 64 bytes from localhost (127.0.0.1): icmp_seq=7 ttl=64 time=0.035 ms
 64 bytes from localhost (127.0.0.1): icmp_seq=8 ttl=64 time=0.031 ms
 64 bytes from localhost (127.0.0.1): icmp_seq=9 ttl=64 time=0.031 ms
 64 bytes from localhost (127.0.0.1): icmp_seq=10 ttl=64 time=0.024 ms
^C
--- localhost ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9202ms
rtt min/avg/max/mdev = 0.021/0.030/0.042/0.005 ms
miguel@miguel-Standard-PC-Q35-ICH9-2009: $
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Proto	Recv-Q	Send-Q	Local Address	Foreign Address	State
tcp	0	0	localhost:domain	0.0.0.0:*	LISTEN
tcp	0	0	localhost:ipp	0.0.0.0:*	LISTEN
tcp6	0	0	ip6-localhost:ipp	:::*	LISTEN
udp	0	0	localhost:domain	0.0.0.0:*	
udp	0	0	miguel-Standard-:bootpc	fedora:bootps	ESTABLISHED
udp	0	0	0.0.0.0:631	0.0.0.0:*	
udp	0	0	0.0.0.0:mdns	0.0.0.0:*	
udp	0	0	0.0.0.0:34530	0.0.0.0:*	
udp6	0	0	:::mdns	:::*	
udp6	0	0	:::56750	:::*	
raw6	0	0	:::ip6-icmp	:::*	7

Proto	RefCnt	Flags	Type	State	I-Node	Path
unix	2	[ACC]	STREAM	LISTENING	780	/run/dbus/system_bus_socket
unix	2	[ACC]	STREAM	LISTENING	782	/run/snapd.socket
unix	2	[ACC]	STREAM	LISTENING	784	/run/snapd-snap.socket
unix	2	[ACC]	STREAM	LISTENING	786	/run/spice-vdagentd/spice-vdagent-sock
unix	2	[ACC]	STREAM	LISTENING	788	/run/uidd/request
unix	3	[]	SEQPACKET	CONNECTED	49147	@0d551
unix	2	[ACC]	STREAM	LISTENING	23100	@/tmp/.X11-unix/X0
unix	3	[]	DGRAM	CONNECTED	19482	/run/systemd/notify
unix	2	[ACC]	STREAM	LISTENING	23102	@/tmp/.X11-unix/X1
unix	2	[ACC]	STREAM	LISTENING	22438	/tmp/.ICE-unix/905
unix	2	[]	DGRAM		19498	/run/systemd/journal/syslog
unix	2	[ACC]	STREAM	LISTENING	19500	/run/systemd/fsck.progress
unix	2	[]	DGRAM		22862	/run/user/1000/systemd/notify
unix	2	[ACC]	STREAM	LISTENING	22865	/run/user/1000/systemd/private
unix	19	[]	DGRAM	CONNECTED	19507	/run/systemd/journal/dev-log
unix	2	[ACC]	STREAM	LISTENING	22871	/run/user/1000/bus
unix	9	[]	DGRAM	CONNECTED	19509	/run/systemd/journal/socket
unix	2	[ACC]	STREAM	LISTENING	19511	/run/systemd/journal/stdout
unix	2	[ACC]	SEQPACKET	LISTENING	19513	/run/udev/control
unix	2	[ACC]	STREAM	LISTENING	22873	/run/user/1000/gnupg/S.dirmgr
unix	2	[ACC]	STREAM	LISTENING	22875	/run/user/1000/gnupg/S.gpg-agent.browser
unix	2	[ACC]	STREAM	LISTENING	20926	@/tmp/dbus-EKUQWnf1
unix	2	[ACC]	STREAM	LISTENING	22877	/run/user/1000/gnupg/S.gpg-agent.extra
unix	2	[ACC]	STREAM	LISTENING	22879	/run/user/1000/gnupg/S.gpg-agent.ssh
unix	2	[ACC]	STREAM	LISTENING	22881	/run/user/1000/gnupg/S.gpg-agent
unix	2	[ACC]	STREAM	LISTENING	22883	/run/user/1000/pipewire-0
unix	2	[ACC]	STREAM	LISTENING	22885	/run/user/1000/pk-debconf-socket
unix	2	[ACC]	STREAM	LISTENING	22887	/run/user/1000/pulse/native
unix	2	[ACC]	STREAM	LISTENING	22889	/run/user/1000/snapd-session-agent.socket
unix	2	[ACC]	STREAM	LISTENING	22437	@/tmp/.ICE-unix/905
unix	2	[ACC]	STREAM	LISTENING	20991	/run/user/1000/keyring/control
unix	2	[ACC]	STREAM	LISTENING	18257	/run/user/1000/keyring/pkcs11
unix	2	[ACC]	STREAM	LISTENING	18258	/run/user/1000/keyring/ssh
unix	2	[ACC]	STREAM	LISTENING	23859	@/home/miguel/.cache/ibus/dbus-7NuHb1kF
unix	2	[ACC]	STREAM	LISTENING	23662	/run/user/1000/at-spi/bus
unix	3	[]	SEQPACKET	CONNECTED	49146	@d71aa
unix	2	[ACC]	STREAM	LISTENING	23104	/run/user/1000/wayland-0
unix	2	[ACC]	STREAM	LISTENING	18020	/run/irqbalance/irqbalance587.sock
unix	2	[ACC]	STREAM	LISTENING	23101	/tmp/.X11-unix/X0
:						

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miguel@miguel-Standard-PC-Q35-ICH9-2009: ~/lab5
miguel@miguel-Standard-PC-Q35-ICH9-2009:~$ cd lab5
miguel@miguel-Standard-PC-Q35-ICH9-2009:~/lab5$ ./alloc
What's your name?
Miguel
Where do you live?
Ligma
Your name is Miguel, and you live in Ligma.
miguel@miguel-Standard-PC-Q35-ICH9-2009:~/lab5$
```

```
#include <stdio.h>
#include <stdlib.h>
```

```
int main() {
    // Pointers to the name and address
    char* name;
    char* addr;

    // Allocate the memory
    name = (char*)malloc(50 * sizeof(char));
    addr = (char*)malloc(500 * sizeof(char));
    if (name == NULL || addr == NULL) {
        printf("Error: Memory allocation failed\n");
        return 1;
    }

    // Get the name
    printf("What's your name? \n");
    scanf("%s", name);
    // Get the address
    printf("Where do you live? \n");
    scanf("%s", addr);

    // Print the name and address
    printf("Your name is %s, and you live in %s.\n", name, addr);

    // Free the pointers to the name and address
    free(name);
    free(addr);
}
```

This code first allocates memory for the name and address. It allocates 50 chars for the name and 500 chars for the address. After that, the program asks for the user's input for the name and address. Once it got the name and address, the program will print the name and address in the same line. Finally, the program then frees the name and address pointers.