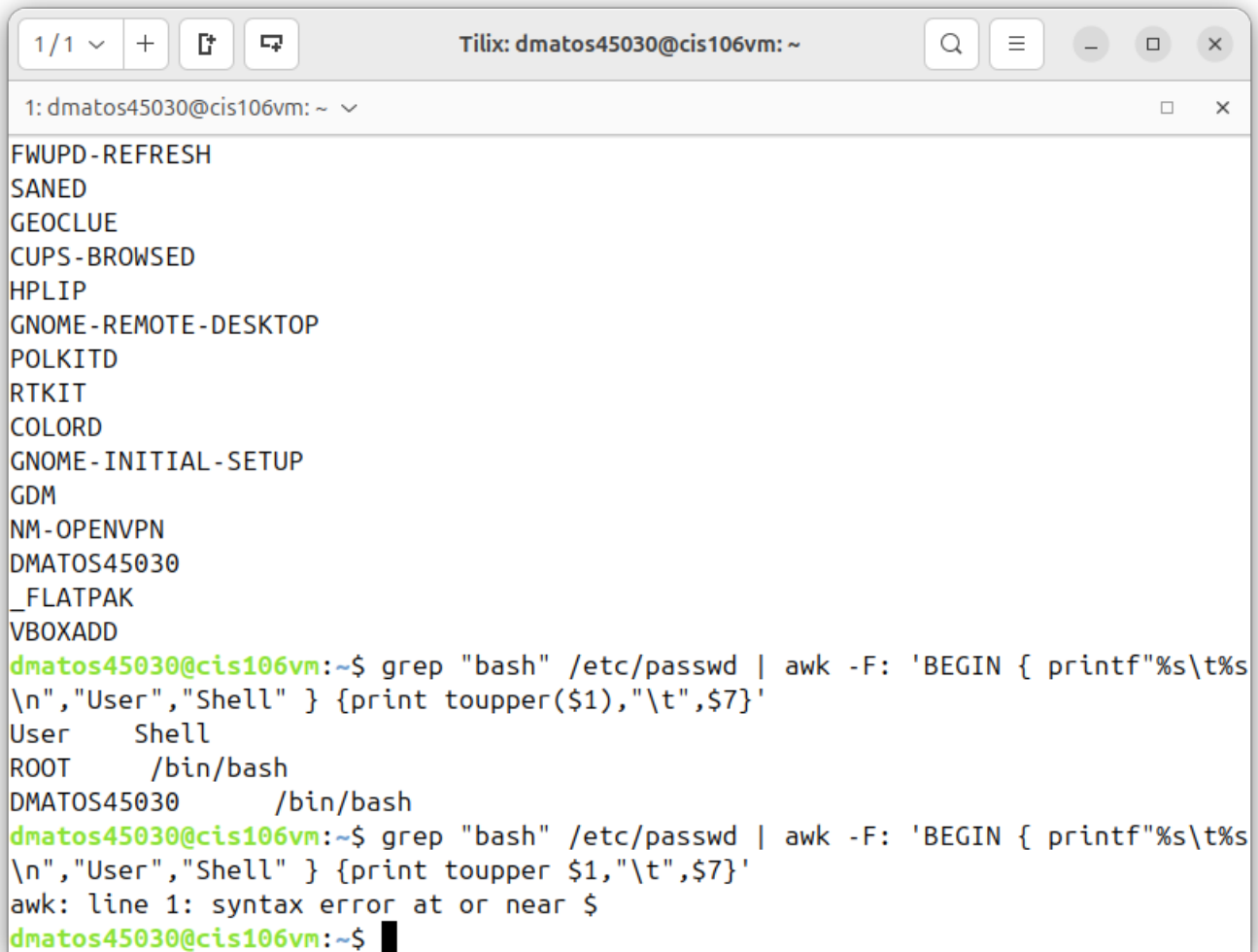


## Practice 5

---



A terminal window titled "Tilix: dmatos45030@cis106vm: ~" showing a list of services and a failed command. The services listed are: FWUPD-REFRESH, SANED, GEOCLUE, CUPS-BROWSED, HPLIP, GNOME-REMOTE-DESKTOP, POLKITD, RTKIT, COLORD, GNOME-INITIAL-SETUP, GDM, NM-OPENVPN, DMATOS45030, \_FLATPAK, and VBOXADD. The user then runs a command to grep for "bash" in /etc/passwd and pipe it to awk. The command is: `grep "bash" /etc/passwd | awk -F: 'BEGIN { printf "%s\t%s\n", "User", "Shell" } {print toupper($1), "\t", $7}'`. The output shows "User" and "Shell" headers, followed by "ROOT /bin/bash" and "DMATOS45030 /bin/bash". The user then runs the same command again, but it fails with a syntax error: `awk: line 1: syntax error at or near $`.

```
1/1 v + [ ] [ ] Tilix: dmatos45030@cis106vm: ~ [Q] [≡] [–] [□] [X]
1: dmatos45030@cis106vm: ~ v [□] [X]
FWUPD-REFRESH
SANED
GEOCLUE
CUPS-BROWSED
HPLIP
GNOME-REMOTE-DESKTOP
POLKITD
RTKIT
COLORD
GNOME-INITIAL-SETUP
GDM
NM-OPENVPN
DMATOS45030
_FLATPAK
VBOXADD
dmatos45030@cis106vm:~$ grep "bash" /etc/passwd | awk -F: 'BEGIN { printf "%s\t%s\n", "User", "Shell" } {print toupper($1), "\t", $7}'
User      Shell
ROOT      /bin/bash
DMATOS45030      /bin/bash
dmatos45030@cis106vm:~$ grep "bash" /etc/passwd | awk -F: 'BEGIN { printf "%s\t%s\n", "User", "Shell" } {print toupper $1, "\t", $7}'
awk: line 1: syntax error at or near $
dmatos45030@cis106vm:~$
```

## Practice 6

---

A screenshot of a Linux terminal window. The title bar shows the user 'Tilix: dmatos45030@cis106vm: ~/Documents/Csv' and the date 'Nov 22, 09:33'. The terminal content shows a list of cars and their specifications, followed by a command to filter for 'honda civic' and its output.

```
t/1 v + [ ] [ ]
t: dmatos45030@cis106vm: ~/Documents/Csv

Mazda GLC Custom l;37.0;4;91.00;68.00;2025.;18.2;82;Japan
Mazda GLC Custom;31.0;4;91.00;68.00;1970.;17.6;82;Japan
Plymouth Horizon Miser;38.0;4;105.0;63.00;2125.;14.7;82;US
Mercury Lynx l;36.0;4;98.00;70.00;2125.;17.3;82;US
Nissan Stanza XE;36.0;4;120.0;88.00;2160.;14.5;82;Japan
Toyota Corolla;34.0;4;108.0;70.00;2245;16.9;82;Japan
Datsun 310 GX;38.0;4;91.00;67.00;1995.;16.2;82;Japan
Buick Century Limited;25.0;6;181.0;110.0;2945;16.4;82;US
Oldsmobile Cutlass Ciera (diesel);38.0;6;262.0;85.00;3015.;17.0;82;US
Chrysler Lebaron Medallion;26.0;4;156.0;92.00;2585;14.5;82;US
Ford Grenada l;22.0;6;232.0;112.0;2835;14.7;82;US
Toyota Celica GT;32.0;4;144.0;96.00;2665.;13.9;82;Japan
Dodge Charger 2.2;36.0;4;135.0;84.00;2370.;13.0;82;US
Chevrolet Camaro;27.0;4;151.0;90.00;2950.;17.3;82;US
Ford Mustang GL;27.0;4;140.0;86.00;2790.;15.6;82;US
Volkswagen Pickup;44.0;4;97.00;52.00;2130.;24.6;82;Europe
Dodge Rampage;32.0;4;135.0;84.00;2295.;11.6;82;US
Ford Ranger;28.0;4;120.0;79.00;2625.;18.6;82;US
Chevy S-10;31.0;4;119.0;82.00;2720.;19.4;82;US
dmatos45030@cis106vm:~/Documents/Csv$ grep -i 'honda civic' cars.csv | sed q
Honda Civic;24.0;4;120.0;97.00;2489.;15.0;74;Japan

Honda Civic CVCC;33.0;4;91.00;53.00;1795.;17.5;75;Japan

Honda Civic;33.0;4;91.00;53.00;1795.;17.4;76;Japan

Honda Civic CVCC;36.1;4;91.00;60.00;1800.;16.4;78;Japan

Honda Civic 1500 gl;44.6;4;91.00;67.00;1850.;13.8;80;Japan

Honda Civic 1300;35.1;4;81.00;60.00;1760.;16.1;81;Japan

Honda Civic;38.0;4;91.00;67.00;1965.;15.0;82;Japan

Honda Civic (auto);32.0;4;91.00;67.00;1965.;15.7;82;Japan

dmatos45030@cis106vm:~/Documents/Csv$
```

## Practice 7

```
Tlrx: dmatos45030@cis106vm: ~/Documents/Csv

1: dmatos45030@cis106vm: ~/Documents/Csv ▾
A[] □ ×
dnatos45030@cis106vm:~/Documents/Csv$ awk 'NR > 3 {print}' cars.csv | sort > cars-no-header.csv
dnatos45030@cis106vm:~/Documents/Csv$ cat cars-no-header.csv | tr ';' ',' | awk -F ',' '{print $1,$NF}'
AMC Ambassador Brougham US
AMC Ambassador DPL US
AMC Ambassador SST US
AMC Concord US
AMC Concord US
AMC Concord d/l US
AMC Concord DL US
AMC Concord DL 6 US
AMC Gremlin US
AMC Gremlin US
AMC Gremlin US
AMC Gremlin US
AMC Hornet US
AMC Hornet US
AMC Hornet US
AMC Hornet US
AMC Hornet Sportabout (sw) US
AMC Matador US
AMC Matador US
AMC Matador US
AMC Matador US
AMC Matador US
AMC Matador (sw) US
AMC Matador (sw) US
AMC Pacer US
AMC Pacer d/l US
AMC Rebel SST US
AMC Rebel SST (sw) US
AMC Spirit DL US
Audi 100LS Europe
Audi 100LS Europe
Audi 100 LS Europe
Audi 4000 Europe
Audi 5000 Europe
```