PROJECT 1
COMP 7506
January 19, 2018
Installing CentOS

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Table of Contents

2.1

I set the root password during the installation

Script started on Wed 17 Jan 2018 07:40:20 PM CST
 ]777;notify;Command
completed;exit   ]0;root@localhost:~   ]7;file://localhost.localdomain/root   [?1034h[root@localhost
~]#
 [K[root@localhost ~]#
 [K[root@localhost ~]#
 [K[root@localhost ~]#
 [K[root@localhost ~]# yum -y install gx   [Kcc
Loaded plugins: fastestmirror, langpacks

base | 3.6 kB   00:00

extras | 3.4 kB   00:00

updates | 3.4 kB   00:00

updates/7/x86_64/primary_d 30% [====-   ] 0.0 B/s | 1.6 MB   --:-- ETA

updates/7/x86_64/primary_db | 5.2 MB 00:00
Loading mirror speeds from cached hostfile
 * base: mirror.compevo.com
 * extras: repos-tx.psychz.net
 * updates: mirrors.lga7.us.voxel.net
Package gcc-4.8.5-16.el7_4.1.x86_64 already installed and latest version
Nothing to do
 ]777;notify;Command completed;yum -y install
gcc   ]0;root@localhost:~   ]7;file://localhost.localdomain/root [root@localhost ~]# yum -y install gcc-
c++
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
 * base: mirror.fdcservers.net
 * extras: mirrors.centos.webair.com
 * updates: ftp.linux.ncsu.edu
Package gcc-c++-4.8.5-16.el7_4.1.x86_64 already installed and latest version
Nothing to do
 ]777;notify;Command completed;yum -y install gcc-
c++   ]0;root@localhost:~   ]7;file://localhost.localdomain/root [root@localhost ~]# yum -y install gcc-
c++ [K [K [K [K [K [K [Kvim-enhanced
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
 * base: centos.vwtonline.net
 * extras: mirrors.centos.webair.com

 * updates: mirror.ash.fastserv.com
Package 2:vim-enhanced-7.4.160-2.el7.x86_64 already installed and latest version
Nothing to do
 ]777;notify;Command completed;yum -y install vim-
enhanced   ]0;root@localhost:~   ]7;file://localhost.localdomain/root [root@localhost ~]# yum -y
install vim-enhanced   [K   [K   [K   [K   [K   [K   [K   [K   [K   [K   [K   [Kemacs
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
 * base: centos.vwtonline.net
 * extras: repos-tx.psychz.net
 * updates: mirrors.lga7.us.voxel.net
Resolving Dependencies
--> Running transaction check
---> Package emacs.x86_64 1:24.3-20.el7_4 will be installed
--> Processing Dependency: emacs-common = 1:24.3-20.el7_4 for package: 1:emacs-24.3-
20.el7_4.x86_64
--> Processing Dependency: libotf.so.0()(64bit) for package: 1:emacs-24.3-20.el7_4.x86_64
--> Processing Dependency: libMagickWand.so.5()(64bit) for package: 1:emacs-24.3-20.el7_4.x86_64
--> Processing Dependency: libMagickCore.so.5()(64bit) for package: 1:emacs-24.3-20.el7_4.x86_64
--> Running transaction check
---> Package ImageMagick.x86_64 0:6.7.8.9-15.el7_2 will be installed
--> Processing Dependency: libwmflite-0.2.so.7()(64bit) for package: ImageMagick-6.7.8.9-
15.el7_2.x86_64
--> Processing Dependency: libImath.so.6()(64bit) for package: ImageMagick-6.7.8.9-15.el7_2.x86_64
--> Processing Dependency: libIlmThread.so.6()(64bit) for package: ImageMagick-6.7.8.9-
15.el7_2.x86_64
--> Processing Dependency: libIlmImf.so.7()(64bit) for package: ImageMagick-6.7.8.9-15.el7_2.x86_64
--> Processing Dependency: libIexMath.so.6()(64bit) for package: ImageMagick-6.7.8.9-15.el7_2.x86_64
--> Processing Dependency: libIex.so.6()(64bit) for package: ImageMagick-6.7.8.9-15.el7_2.x86_64
--> Processing Dependency: libHalf.so.6()(64bit) for package: ImageMagick-6.7.8.9-15.el7_2.x86_64
---> Package emacs-common.x86_64 1:24.3-20.el7_4 will be installed
--> Processing Dependency: liblockfile.so.1()(64bit) for package: 1:emacs-common-24.3-20.el7_4.x86_64
---> Package libotf.x86_64 0:0.9.13-4.el7 will be installed
--> Processing Dependency: libXaw.so.7()(64bit) for package: libotf-0.9.13-4.el7.x86_64
--> Running transaction check
---> Package OpenEXR-libs.x86_64 0:1.7.1-7.el7 will be installed
---> Package ilmbase.x86_64 0:1.0.3-7.el7 will be installed
---> Package libXaw.x86_64 0:1.0.13-4.el7 will be installed
---> Package liblockfile.x86_64 0:1.08-17.el7 will be installed
---> Package libwmf-lite.x86_64 0:0.2.8.4-41.el7_1 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

==
 Package   Arch   Version   Repository   Size
==
Installing:

```
emacs          x86_64      1:24.3-20.el7_4      updates      2.9 M
Installing for dependencies:
ImageMagick     x86_64      6.7.8.9-15.el7_2     base        2.1 M
OpenEXR-libs    x86_64      1.7.1-7.el7          base        217 k
emacs-common    x86_64      1:24.3-20.el7_4      updates      20 M
ilmbase         x86_64      1.0.3-7.el7          base        100 k
libXaw          x86_64      1.0.13-4.el7         base        192 k
liblockfile     x86_64      1.08-17.el7          base         21 k
libotf          x86_64      0.9.13-4.el7         base         92 k
libwmf-lite     x86_64      0.2.8.4-41.el7_1     base         66 k

Transaction Summary
================================================================================
Install  1 Package (+8 Dependent packages)

Total download size: 26 M
Installed size: 92 M
Downloading packages:

(1/9): OpenEXR-libs-1.7.1-7.el7.x86_64.rpm              | 217 kB   00:00

(2/9): libXaw-1.0.13-4.el7.x86_64.rpm                   | 192 kB   00:00

(3/9): liblockfile-1.08-17.el7.x86_64.rpm              |  21 kB   00:00

(4/9): ilmbase-1.0.3-7.el7.x86_64.rpm                  | 100 kB   00:00

(6/9): emacs-24.3-20.el7_4 5% [-          ]  0.0 B/s | 1.4 MB   --:-- ETA

(5/9): libotf-0.9.13-4.el7.x86_64.rpm                  |  92 kB   00:00

(6/9): ImageMagick-6.7.8.9-15.el7_2.x86_64.rpm         | 2.1 MB   00:00

(7/9): libwmf-lite-0.2.8.4-41.el7_1.x86_64.rpm         |  66 kB   00:00

(9/9): emacs-common-24.3-2 20% [===      ] 4.7 MB/s | 5.5 MB   00:04 ETA

(8/9): emacs-24.3-20.el7_4.x86_64.rpm                  | 2.9 MB   00:00

(9/9): emacs-common-24.3-2 28% [====-    ] 4.7 MB/s | 7.5 MB   00:03 ETA

(9/9): emacs-common-24.3-2 31% [=====    ] 4.6 MB/s | 8.2 MB   00:03 ETA

(9/9): emacs-common-24.3-2 33% [=====    ] 4.4 MB/s | 8.8 MB   00:03 ETA

(9/9): emacs-common-24.3-2 36% [=====-   ] 4.3 MB/s | 9.5 MB   00:03 ETA

(9/9): emacs-common-24.3-2 38% [======   ] 4.1 MB/s |  10 MB   00:03 ETA
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(9/9): emacs-common-24.3-2 39% [======   ] 3.9 MB/s | 10 MB   00:03 ETA

(9/9): emacs-common-24.3-2 41% [======-   ] 3.8 MB/s | 11 MB   00:04 ETA

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(9/9): emacs-common-24.3-2 48% [=======-   ] 3.2 MB/s | 13 MB   00:04 ETA

(9/9): emacs-common-24.3-2 49% [=======-   ] 3.1 MB/s | 13 MB   00:04 ETA

(9/9): emacs-common-24.3-2 51% [========   ] 3.0 MB/s | 14 MB   00:04 ETA

(9/9): emacs-common-24.3-2 53% [=======-   ] 2.9 MB/s | 14 MB   00:04 ETA

(9/9): emacs-common-24.3-2 55% [=======-   ] 2.8 MB/s | 14 MB   00:04 ETA

(9/9): emacs-common-24.3-2 56% [=========   ] 2.7 MB/s | 15 MB   00:04 ETA

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(9/9): emacs-common-24.3-2 59% [========-   ] 2.6 MB/s | 16 MB   00:04 ETA

(9/9): emacs-common-24.3-2 61% [=========-   ] 2.5 MB/s | 16 MB   00:04 ETA

(9/9): emacs-common-24.3-2 62% [=========   ] 2.4 MB/s | 16 MB   00:04 ETA

(9/9): emacs-common-24.3-2 64% [=========   ] 2.3 MB/s | 17 MB   00:04 ETA

(9/9): emacs-common-24.3-2 65% [=========-   ] 2.3 MB/s | 17 MB   00:03 ETA

(9/9): emacs-common-24.3-2 67% [=========-   ] 2.2 MB/s | 18 MB   00:03 ETA

(9/9): emacs-common-24.3-2 68% [=========-   ] 2.1 MB/s | 18 MB   00:03 ETA

(9/9): emacs-common-24.3-2 69% [==========   ] 2.0 MB/s | 18 MB   00:03 ETA

(9/9): emacs-common-24.3-2 70% [==========   ] 2.0 MB/s | 18 MB   00:03 ETA

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(9/9): emacs-common-24.3-2 72% [==========-   ] 1.8 MB/s | 19 MB   00:03 ETA

(9/9): emacs-common-24.3-2 74% [==========-   ] 1.8 MB/s | 19 MB   00:03 ETA

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(9/9): emacs-common-24.3-2 75% [===========    ] 1.7 MB/s |  20 MB   00:03 ETA

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(9/9): emacs-common-24.3-2 94% [===============] 1.4 MB/s |  25 MB   00:00 ETA

(9/9): emacs-common-24.3-2 96% [===============] 1.4 MB/s |  25 MB   00:00 ETA

(9/9): emacs-common-24.3-2 98% [===============-] 1.4 MB/s |  26 MB   00:00 ETA

(9/9): emacs-common-24.3-20.el7_4.x86_64.rpm          |  20 MB   00:15
--------------------------------------------------------------------------------
Total                         1.7 MB/s |  26 MB  00:15
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction

  Installing : ilmbase-1.0.3-7.el7.x86_64 [                    ] 1/9
  Installing : ilmbase-1.0.3-7.el7.x86_64 [###                 ] 1/9
  Installing : ilmbase-1.0.3-7.el7.x86_64 [#######             ] 1/9
  Installing : ilmbase-1.0.3-7.el7.x86_64 [###########         ] 1/9
  Installing : ilmbase-1.0.3-7.el7.x86_64 [##############      ] 1/9
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Installing : ilmbase-1.0.3-7.el7.x86_64 [###################        ] 1/9
Installing : ilmbase-1.0.3-7.el7.x86_64 [#####################      ] 1/9
Installing : ilmbase-1.0.3-7.el7.x86_64 [#######################     ] 1/9
Installing : ilmbase-1.0.3-7.el7.x86_64 [#########################   ] 1/9
Installing : ilmbase-1.0.3-7.el7.x86_64 [##########################  ] 1/9
Installing : ilmbase-1.0.3-7.el7.x86_64 [############################] 1/9
Installing : ilmbase-1.0.3-7.el7.x86_64                  1/9

Installing : OpenEXR-libs-1.7.1-7.el7.x86 [                    ] 2/9
Installing : OpenEXR-libs-1.7.1-7.el7.x86 [##                  ] 2/9
Installing : OpenEXR-libs-1.7.1-7.el7.x86 [####                ] 2/9
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Installing : OpenEXR-libs-1.7.1-7.el7.x86 [########            ] 2/9
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Installing : OpenEXR-libs-1.7.1-7.el7.x86_64                  2/9

Installing : liblockfile-1.08-17.el7.x86_ [                 ] 3/9
Installing : liblockfile-1.08-17.el7.x86_ [##########         ] 3/9
Installing : liblockfile-1.08-17.el7.x86_ [#################    ] 3/9
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Installing : 1:emacs-common-24.3-20.el7_4 [                 ] 4/9
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Installing : libXaw-1.0.13-4.el7.x86_64 [                  ] 5/9
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Installing : libXaw-1.0.13-4.el7.x86_64 [########          ] 5/9
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Installing : libXaw-1.0.13-4.el7.x86_64                5/9

Installing : libotf-0.9.13-4.el7.x86_64 [                ] 6/9
Installing : libotf-0.9.13-4.el7.x86_64 [####            ] 6/9
Installing : libotf-0.9.13-4.el7.x86_64 [#####           ] 6/9
Installing : libotf-0.9.13-4.el7.x86_64 [#######         ] 6/9
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Installing : libotf-0.9.13-4.el7.x86_64 [############################] 6/9
Installing : libotf-0.9.13-4.el7.x86_64                6/9

Installing : libwmf-lite-0.2.8.4-41.el7_1 [                ] 7/9
Installing : libwmf-lite-0.2.8.4-41.el7_1 [############     ] 7/9
Installing : libwmf-lite-0.2.8.4-41.el7_1 [#####################    ] 7/9
Installing : libwmf-lite-0.2.8.4-41.el7_1 [########################  ] 7/9
Installing : libwmf-lite-0.2.8.4-41.el7_1 [##########################] 7/9
Installing : libwmf-lite-0.2.8.4-41.el7_1.x86_64                7/9

Installing : ImageMagick-6.7.8.9-15.el7_2 [                ] 8/9
Installing : ImageMagick-6.7.8.9-15.el7_2 [#               ] 8/9
Installing : ImageMagick-6.7.8.9-15.el7_2 [##              ] 8/9
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Installing : ImageMagick-6.7.8.9-15.el7_2 [###                        ] 8/9
Installing : ImageMagick-6.7.8.9-15.el7_2 [####                       ] 8/9
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Installing : ImageMagick-6.7.8.9-15.el7_2 [#######                    ] 8/9
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Installing : ImageMagick-6.7.8.9-15.el7_2 [###########                ] 8/9
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Installing : ImageMagick-6.7.8.9-15.el7_2 [#############              ] 8/9
Installing : ImageMagick-6.7.8.9-15.el7_2 [##############             ] 8/9
Installing : ImageMagick-6.7.8.9-15.el7_2 [###############            ] 8/9
Installing : ImageMagick-6.7.8.9-15.el7_2 [################           ] 8/9
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Installing : ImageMagick-6.7.8.9-15.el7_2 [##################         ] 8/9
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Installing : ImageMagick-6.7.8.9-15.el7_2 [###########################] 8/9
Installing : ImageMagick-6.7.8.9-15.el7_2.x86_64                 8/9

Installing : 1:emacs-24.3-20.el7_4.x86_64 [                   ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [#                  ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [##                 ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [###                ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [####               ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [#####              ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [######             ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [#######            ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [########           ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [#########          ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [##########         ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [###########        ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [############       ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [#############      ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [##############     ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [###############    ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [################   ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [#################  ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [################## ] 9/9
```

```
Installing : 1:emacs-24.3-20.el7_4.x86_64 [####################        ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [####################        ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [#####################       ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [######################      ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [#######################     ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [########################    ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [#########################   ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [##########################  ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64 [########################### ] 9/9
Installing : 1:emacs-24.3-20.el7_4.x86_64                            9/9

Verifying  : OpenEXR-libs-1.7.1-7.el7.x86_64                         1/9

Verifying  : libwmf-lite-0.2.8.4-41.el7_1.x86_64                     2/9

Verifying  : libXaw-1.0.13-4.el7.x86_64                              3/9

Verifying  : liblockfile-1.08-17.el7.x86_64                          4/9

Verifying  : libotf-0.9.13-4.el7.x86_64                              5/9

Verifying  : ilmbase-1.0.3-7.el7.x86_64                              6/9

Verifying  : 1:emacs-24.3-20.el7_4.x86_64                            7/9

Verifying  : ImageMagick-6.7.8.9-15.el7_2.x86_64                     8/9

Verifying  : 1:emacs-common-24.3-20.el7_4.x86_64                     9/9

Installed:
  emacs.x86_64 1:24.3-20.el7_4

Dependency Installed:
  ImageMagick.x86_64 0:6.7.8.9-15.el7_2  OpenEXR-libs.x86_64 0:1.7.1-7.el7
  emacs-common.x86_64 1:24.3-20.el7_4    ilmbase.x86_64 0:1.0.3-7.el7
  libXaw.x86_64 0:1.0.13-4.el7           liblockfile.x86_64 0:1.08-17.el7
  libotf.x86_64 0:0.9.13-4.el7           libwmf-lite.x86_64 0:0.2.8.4-41.el7_1

Complete!
 ]777;notify;Command completed;yum -y install
emacs   ]0;root@localhost:~   ]7;file://localhost.localdomain/root  [root@localhost ~]# yum -y install
emacs   [K   [K   [K   [K   [Kgdb
Loaded plugins: fastestmirror, langpacks
Existing lock /var/run/yum.pid: another copy is running as pid 56164.
Another app is currently holding the yum lock; waiting for it to exit...
  The other application is: PackageKit
    Memory :  29 M RSS (1.4 GB VSZ)
    Started: Wed Jan 17 20:08:25 2018 - 00:05 ago
```

State : Sleeping, pid: 56164
Another app is currently holding the yum lock; waiting for it to exit...
 The other application is: PackageKit
   Memory : 29 M RSS (1.4 GB VSZ)
   Started: Wed Jan 17 20:08:25 2018 - 00:07 ago
   State : Sleeping, pid: 56164
Loading mirror speeds from cached hostfile
 * base: mirror.dal10.us.leaseweb.net
 * extras: reflector.westga.edu
 * updates: mirror.ash.fastserv.com
Package gdb-7.6.1-100.el7.x86_64 already installed and latest version
Nothing to do
 ]777;notify;Command completed;yum -y install
gdb   ]0;root@localhost:~   ]7;file://localhost.localdomain/root [root@localhost ~]# yum -y install
gdb   [K   [K   [Kethtool
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
 * base: mirror.dal10.us.leaseweb.net
 * extras: bay.uchicago.edu
 * updates: mirrors.lga7.us.voxel.net
Package 2:ethtool-4.8-1.el7.x86_64 already installed and latest version
Nothing to do
 ]777;notify;Command completed;yum -y install
ethtool   ]0;root@localhost:~   ]7;file://localhost.localdomain/root [root@localhost ~]# yum -y install
ethtool   [K   [K   [K   [K   [K   [K   [Khdparm
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
 * base: mirrors.usinternet.com
 * extras: reflector.westga.edu
 * updates: ftp.linux.ncsu.edu
Resolving Dependencies
--> Running transaction check
---> Package hdparm.x86_64 0:9.43-5.el7 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

==
 Package   Arch   Version   Repository   Size
==
Installing:
 hdparm   x86_64   9.43-5.el7   base   83 k

Transaction Summary
==
Install 1 Package

Total download size: 83 k

Installed size: 152 k
Downloading packages:

hdparm-9.43-5.el7.x86_64.rpm | 83 kB   00:00
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction

 Installing : hdparm-9.43-5.el7.x86_64 [   ] 1/1
 Installing : hdparm-9.43-5.el7.x86_64 [#############   ] 1/1
 Installing : hdparm-9.43-5.el7.x86_64 [####################   ] 1/1
 Installing : hdparm-9.43-5.el7.x86_64 [#####################] 1/1
 Installing : hdparm-9.43-5.el7.x86_64 [#########################] 1/1
 Installing : hdparm-9.43-5.el7.x86_64 [############################] 1/1
 Installing : hdparm-9.43-5.el7.x86_64 [#############################] 1/1
 Installing : hdparm-9.43-5.el7.x86_64   1/1

 Verifying : hdparm-9.43-5.el7.x86_64   1/1

Installed:
 hdparm.x86_64 0:9.43-5.el7

Complete!
 ]777;notify;Command completed;yum -y install
hdparm   ]0;root@localhost:~   ]7;file://localhost.localdomain/root [root@localhost ~]# yum -y install
hdparm   [K   [K   [K   [K   [K   [Kpciutils
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
 * base: mirror.dal10.us.leaseweb.net
 * extras: reflector.westga.edu
 * updates: ftp.linux.ncsu.edu
Package pciutils-3.5.1-2.el7.x86_64 already installed and latest version
Nothing to do
 ]777;notify;Command completed;yum -y install
pciutils   ]0;root@localhost:~   ]7;file://localhost.localdomain/root [root@localhost ~]# yum -y install
pciutils   [K   [K   [K   [K   [K   [K   [K   [Kfile
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
 * base: centos.gbeservers.com
 * extras: reflector.westga.edu
 * updates: ftp.linux.ncsu.edu
Package file-5.11-33.el7.x86_64 already installed and latest version
Nothing to do
 ]777;notify;Command completed;yum -y install
file   ]0;root@localhost:~   ]7;file://localhost.localdomain/root [root@localhost ~]# exit
exit

Script done on Wed 17 Jan 2018 08:09:34 PM CST

2.2

Script started on Wed 17 Jan 2018 08:11:26 PM CST
 ]777;notify;Command
completed;exit   ]0;root@localhost:~   ]7;file://localhost.localdomain/root   [?1034h[root@localhost
~]# more /proc/cpuinfo
processor   : 0
vendor_id   : AuthenticAMD
cpu family   : 21
model   : 2
model name   : AMD FX(tm)-8350 Eight-Core Processor
stepping   : 0
microcode   : 0x6000822
cpu MHz   : 4012.617
cache size   : 2048 KB
physical id   : 0
siblings : 2
core id   : 0
cpu cores   : 2
apicid   : 0
initial apicid   : 0
fpu   : yes
fpu_exception   : yes
cpuid level   : 13
wp   : yes
flags   : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov
pat pse36 clflush mmx fxsr sse sse2 ht syscall nx mmxext fxsr_opt pdpe1gb rdtscp
 lm constant_tsc art rep_good nopl tsc_reliable nonstop_tsc aperfmperf pni pclmu
lqdq ssse3 fma cx16 sse4_1 sse4_2 x2apic popcnt aes xsave avx f16c hypervisor la
hf_lm cmp_legacy extapic cr8_legacy abm sse4a misalignsse 3dnowprefetch osvw xop
 fma4 tbm bmi1 arat
bogomips   : 8026.61
TLB size : 1536 4K pages
  [7m--More--(0%) [27m

  [K
...skipping 27 lines

clflush size   : 64
cache_alignment   : 64
address sizes   : 42 bits physical, 48 bits virtual
power management:

processor   : 2
vendor_id   : AuthenticAMD
cpu family   : 21

```
model           : 2
model name      : AMD FX(tm)-8350 Eight-Core Processor
stepping        : 0
microcode       : 0x6000822
cpu MHz              : 4012.617
cache size      : 2048 KB
physical id     : 1
siblings : 2
core id         : 0
cpu cores       : 2
apicid          : 2
initial apicid  : 2
fpu             : yes
fpu_exception   : yes
cpuid level     : 13
wp              : yes
flags           : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov
pat pse36 clflush mmx fxsr sse sse2 ht syscall nx mmxext fxsr_opt pdpe1gb rdtscp
 lm constant_tsc art rep_good nopl tsc_reliable nonstop_tsc aperfmperf pni pclmu
  [7m--More--(0%)  [27m
lqdq ssse3 fma cx16 sse4_1 sse4_2 x2apic popcnt aes xsave avx f16c hypervisor la
  [7m--More--(0%)  [27m
hf_lm cmp_legacy extapic cr8_legacy abm sse4a misalignsse 3dnowprefetch osvw xop
  [7m--More--(0%)  [27m
 fma4 tbm bmi1 arat
  [7m--More--(0%)  [27m
 [Kbogomips     : 8026.61
  [7m--More--(0%)  [27m
 [KTLB size     : 1536 4K pages
  [7m--More--(0%)  [27m
clflush size    : 64
  [7m--More--(0%)  [27m
cache_alignment        : 64
  [7m--More--(0%)  [27m
address sizes   : 42 bits physical, 48 bits virtual
  [7m--More--(0%)  [27m
power management:
  [7m--More--(0%)  [27m

 [K
  [7m--More--(0%)  [27m
 [Kprocessor    : 3
  [7m--More--(0%)  [27m
 [Kvendor_id    : AuthenticAMD
  [7m--More--(0%)  [27m
 [Kcpu family   : 21
  [7m--More--(0%)  [27m
 [Kmodel               : 2
```

[7m--More--(0%) [27m
[Kmodel name : AMD FX(tm)-8350 Eight-Core Processor
[7m--More--(0%) [27m
[Kstepping   : 0
[7m--More--(0%) [27m
[Kmicrocode   : 0x6000822
[7m--More--(0%) [27m
[Kcpu MHz   : 4012.617
[7m--More--(0%) [27m
[Kcache size   : 2048 KB
[7m--More--(0%) [27m
[Kphysical id   : 1
[7m--More--(0%) [27m
[Ksiblings   : 2
[7m--More--(0%) [27m
[Kcore id   : 1
[7m--More--(0%) [27m
[Kcpu cores   : 2
[7m--More--(0%) [27m
[Kapicid   : 3
[7m--More--(0%) [27m
initial apicid   : 3
[7m--More--(0%) [27m
[Kfpu   : yes
[7m--More--(0%) [27m
fpu_exception   : yes
[7m--More--(0%) [27m
[Kcpuid level   : 13
[7m--More--(0%) [27m
[Kwp   : yes
[7m--More--(0%) [27m
[Kflags   : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov
[7m--More--(0%) [27m
pat pse36 clflush mmx fxsr sse sse2 ht syscall nx mmxext fxsr_opt pdpe1gb rdtscp
[7m--More--(0%) [27m
 lm constant_tsc art rep_good nopl tsc_reliable nonstop_tsc aperfmperf pni pclmu
[7m--More--(0%) [27m
lqdq ssse3 fma cx16 sse4_1 sse4_2 x2apic popcnt aes xsave avx f16c hypervisor la
[7m--More--(0%) [27m
hf_lm cmp_legacy extapic cr8_legacy abm sse4a misalignsse 3dnowprefetch osvw xop
[7m--More--(0%) [27m
 fma4 tbm bmi1 arat
[7m--More--(0%) [27m
[Kbogomips   : 8026.61
[7m--More--(0%) [27m
[KTLB size   : 1536 4K pages
[7m--More--(0%) [27m
clflush size   : 64

[7m--More--(0%) [27m
cache_alignment   : 64
 [7m--More--(0%) [27m
address sizes   : 42 bits physical, 48 bits virtual
 [7m--More--(0%) [27m
power management:
 [7m--More--(0%) [27m

 [K
 ]777;notify;Command completed;more
/proc/cpuinfo   ]0;root@localhost:~   ]7;file://localhost.localdomain/root [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/cpuinfo   ]0;root@localhost:~   ]7;file://localhost.localdomain/root [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/cpuinfo   ]0;root@localhost:~   ]7;file://localhost.localdomain/root [root@localhost ~]# more
/proc/cpuinfo   [1Pinfo   [1Pinfo   [1Pinfo   minfo   einfo   minfo
MemTotal: 4477664 kB
MemFree: 696456 kB
MemAvailable: 3065928 kB
Buffers: 4180 kB
Cached: 2510604 kB
SwapCached: 0 kB
Active: 1480152 kB
Inactive: 1828716 kB
Active(anon):   795004 kB
Inactive(anon):   17768 kB
Active(file):   685148 kB
Inactive(file): 1810948 kB
Unevictable: 0 kB
Mlocked: 0 kB
SwapTotal: 4194300 kB
SwapFree: 4194300 kB
Dirty: 60 kB
Writeback: 0 kB
AnonPages: 794100 kB
Mapped: 142576 kB
Shmem: 18688 kB
Slab: 279744 kB
SReclaimable: 161836 kB
SUnreclaim: 117908 kB
KernelStack: 9056 kB
PageTables: 30228 kB
NFS_Unstable: 0 kB
 [7m--More--(0%) [27m
Bounce: 0 kB
 [7m--More--(0%) [27m
WritebackTmp: 0 kB

[7m--More--(0%) [27m
CommitLimit: 6433132 kB
 [7m--More--(0%) [27m
Committed_AS: 3541000 kB
 [7m--More--(0%) [27m
VmallocTotal: 34359738367 kB
 [7m--More--(0%) [27m
VmallocUsed: 194984 kB
 [7m--More--(0%) [27m
VmallocChunk: 34359310332 kB
 [7m--More--(0%) [27m
HardwareCorrupted: 0 kB
 [7m--More--(0%) [27m
AnonHugePages: 317440 kB
 [7m--More--(0%) [27m
HugePages_Total: 0
 [7m--More--(0%) [27m
HugePages_Free: 0
 [7m--More--(0%) [27m
HugePages_Rsvd: 0
 [7m--More--(0%) [27m
HugePages_Surp: 0
 [7m--More--(0%) [27m
Hugepagesize: 2048 kB
 [7m--More--(0%) [27m
DirectMap4k: 110400 kB
 [7m--More--(0%) [27m
DirectMap2M: 2609152 kB
 [7m--More--(0%) [27m
DirectMap1G: 2097152 kB
 ]777;notify;Command completed;more
/proc/meminfo   ]0;root@localhost:~   ]7;file://localhost.localdomain/root [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/meminfo   ]0;root@localhost:~   ]7;file://localhost.localdomain/root [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/meminfo   ]0;root@localhost:~   ]7;file://localhost.localdomain/root [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/meminfo   ]0;root@localhost:~   ]7;file://localhost.localdomain/root [root@localhost ~]# more
/proc/meminfo   [C [C   [1P/proc/meminfo   [1P/proc/meminfo
         [1P/proc/meminfo   [1P/proc/meminfo   [1P/proc/memi
nfo   [C [C [C [C [C   [1P/meminfo   [1P/meminfo   [1P
/meminfo   [1P/meminfo   s/meminfo   b/meminfo   i/meminfo
     n/meminfo   [C [C [C [C [C   [1Pnfo   [1Pnfo   [1Pnfo   [C [C [C [K [K [
K [Klspci
00:00.0 Host bridge: Intel Corporation 440BX/ZX/DX - 82443BX/ZX/DX Host bridge (rev 01)
00:01.0 PCI bridge: Intel Corporation 440BX/ZX/DX - 82443BX/ZX/DX AGP bridge (rev 01)
00:07.0 ISA bridge: Intel Corporation 82371AB/EB/MB PIIX4 ISA (rev 08)
00:07.1 IDE interface: Intel Corporation 82371AB/EB/MB PIIX4 IDE (rev 01)

00:07.3 Bridge: Intel Corporation 82371AB/EB/MB PIIX4 ACPI (rev 08)
00:07.7 System peripheral: VMware Virtual Machine Communication Interface (rev 10)
00:0f.0 VGA compatible controller: VMware SVGA II Adapter
00:10.0 SCSI storage controller: LSI Logic / Symbios Logic 53c1030 PCI-X Fusion-MPT Dual Ultra320 SCSI (rev 01)
00:11.0 PCI bridge: VMware PCI bridge (rev 02)
00:15.0 PCI bridge: VMware PCI Express Root Port (rev 01)
00:15.1 PCI bridge: VMware PCI Express Root Port (rev 01)
00:15.2 PCI bridge: VMware PCI Express Root Port (rev 01)
00:15.3 PCI bridge: VMware PCI Express Root Port (rev 01)
00:15.4 PCI bridge: VMware PCI Express Root Port (rev 01)
00:15.5 PCI bridge: VMware PCI Express Root Port (rev 01)
00:15.6 PCI bridge: VMware PCI Express Root Port (rev 01)
00:15.7 PCI bridge: VMware PCI Express Root Port (rev 01)
00:16.0 PCI bridge: VMware PCI Express Root Port (rev 01)
00:16.1 PCI bridge: VMware PCI Express Root Port (rev 01)
00:16.2 PCI bridge: VMware PCI Express Root Port (rev 01)
00:16.3 PCI bridge: VMware PCI Express Root Port (rev 01)
00:16.4 PCI bridge: VMware PCI Express Root Port (rev 01)
00:16.5 PCI bridge: VMware PCI Express Root Port (rev 01)
00:16.6 PCI bridge: VMware PCI Express Root Port (rev 01)
00:16.7 PCI bridge: VMware PCI Express Root Port (rev 01)
00:17.0 PCI bridge: VMware PCI Express Root Port (rev 01)
00:17.1 PCI bridge: VMware PCI Express Root Port (rev 01)
00:17.2 PCI bridge: VMware PCI Express Root Port (rev 01)
00:17.3 PCI bridge: VMware PCI Express Root Port (rev 01)
00:17.4 PCI bridge: VMware PCI Express Root Port (rev 01)
00:17.5 PCI bridge: VMware PCI Express Root Port (rev 01)
00:17.6 PCI bridge: VMware PCI Express Root Port (rev 01)
00:17.7 PCI bridge: VMware PCI Express Root Port (rev 01)
00:18.0 PCI bridge: VMware PCI Express Root Port (rev 01)
00:18.1 PCI bridge: VMware PCI Express Root Port (rev 01)
00:18.2 PCI bridge: VMware PCI Express Root Port (rev 01)
00:18.3 PCI bridge: VMware PCI Express Root Port (rev 01)
00:18.4 PCI bridge: VMware PCI Express Root Port (rev 01)
00:18.5 PCI bridge: VMware PCI Express Root Port (rev 01)
00:18.6 PCI bridge: VMware PCI Express Root Port (rev 01)
00:18.7 PCI bridge: VMware PCI Express Root Port (rev 01)
02:00.0 USB controller: VMware USB1.1 UHCI Controller
02:01.0 Ethernet controller: Intel Corporation 82545EM Gigabit Ethernet Controller (Copper) (rev 01)
02:02.0 Multimedia audio controller: Ensoniq ES1371/ES1373 / Creative Labs CT2518 (rev 02)
02:03.0 USB controller: VMware USB2 EHCI Controller
 ]777;notify;Command
completed;/sbin/lspci   ]0;root@localhost:~   ]7;file://localhost.localdomain/root [root@localhost ~]#
/sbin/lspci   [K   [K   [K   [K   [Khdparm -i /dev/sda

/dev/sda:

SG_IO: bad/missing sense data, sb[]: 70 00 05 00 00 00 00 0a 00 00 00 00 20 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

 HDIO_GET_IDENTITY failed: Invalid argument

 ]777;notify;Command completed;/sbin/hdparm -i
/dev/sda]0;root@localhost:~]7;file://localhost.localdomain/root [root@localhost ~]#
/sbin/hdparm -i /dev/sda   [1Pda   hda
/dev/hda: No such file or directory

 ]777;notify;Command completed;/sbin/hdparm -i
/dev/hda]0;root@localhost:~]7;file://localhost.localdomain/root [root@localhost ~]#
/sbin/hdparm -i
/dev/hda [K [K [K [K [K [K [K [K [K [K [K [K [K [K [K [K [K [Kethtool eth0
Settings for eth0:
Cannot get device settings: No such device
Cannot get wake-on-lan settings: No such device
Cannot get message level: No such device
Cannot get link status: No such device
No data available

 ]777;notify;Command completed;/sbin/ethtool
eth0]0;root@localhost:~]7;file://localhost.localdomain/root [root@localhost ~]# /sbin/ethtool
eth0   [C [C [1P eth0   [1P eth0   [1P eth0   [1P eth0   [1P
eth0   [1P eth0   [1P eth0   i eth0   p eth0   c eth0   o eth0   n
eth0   f eth0   i eth0   g eth0
bash: /sbin/ipconfig: No such file or directory

 ]777;notify;Command completed;/sbin/ipconfig
eth0]0;root@localhost:~]7;file://localhost.localdomain/root [root@localhost ~]# /sbin/ipconfig
eth0 [K [K [K [K [K [K [K [K [K [K [K [K [K [K [K [K [K [K [K
    more /proc/interrupts
         CPU0   CPU1   CPU2   CPU3
  0:     127   0   0   0 IO-APIC-edge   timer
  1:      11   0   1725   0 IO-APIC-edge   i8042
  6:       2   0   0   0 IO-APIC-edge   floppy
  8:       1   0   0   0 IO-APIC-edge   rtc0
  9:       0   0   0   0 IO-APIC-fasteoi   acpi
 12:    94207   0   0   0 IO-APIC-edge   i8042
 14:       0   0   0   0 IO-APIC-edge   ata_piix
 15:     528   0   3239   0 IO-APIC-edge   ata_piix
 16:       6   0   0   2834 IO-APIC-fasteoi   vmwgfx, sn
d_ens1371
 17:    69280   0   0   0 IO-APIC-fasteoi   ehci_hcd:u
sb1, ioc0
 18:     186   0   50   0 IO-APIC-fasteoi   uhci_hcd:u
sb2
 19:       7   0   25635   0 IO-APIC-fasteoi   ens33
 24:       0   0   0   0 PCI-MSI-edge   PCIe PME,
pciehp
 25:       0   0   0   0 PCI-MSI-edge   PCIe PME,
pciehp
 26:       0   0   0   0 PCI-MSI-edge   PCIe PME,

```
 pciehp
 27:      0      0      0      0 PCI-MSI-edge    PCIe PME,
 pciehp
 28:      0      0      0      0 PCI-MSI-edge    PCIe PME,
 pciehp
 29:      0      0      0      0 PCI-MSI-edge    PCIe PME,
 [7m--More--(0%) [27m
 pciehp [K
 [7m--More--(0%) [27m
 30:      0      0      0      0 PCI-MSI-edge    PCIe PME,
 [7m--More--(0%) [27m
 pciehp [K
 [7m--More--(0%) [27m
 31:      0      0      0      0 PCI-MSI-edge    PCIe PME,
 [7m--More--(0%) [27m
 pciehp [K
 [7m--More--(0%) [27m
 32:      0      0      0      0 PCI-MSI-edge    PCIe PME,
 [7m--More--(0%) [27m
 pciehp [K
 [7m--More--(0%) [27m
 33:      0      0      0      0 PCI-MSI-edge    PCIe PME,
 [7m--More--(0%) [27m
 pciehp [K
 [7m--More--(0%) [27m
 34:      0      0      0      0 PCI-MSI-edge    PCIe PME,
 [7m--More--(0%) [27m
 pciehp [K
 [7m--More--(0%) [27m
 35:      0      0      0      0 PCI-MSI-edge    PCIe PME,
 [7m--More--(0%) [27m
 pciehp [K
 [7m--More--(0%) [27m
 36:      0      0      0      0 PCI-MSI-edge    PCIe PME,
 [7m--More--(0%) [27m
 pciehp [K
 [7m--More--(0%) [27m
 37:      0      0      0      0 PCI-MSI-edge    PCIe PME,
 [7m--More--(0%) [27m
 pciehp [K
 [7m--More--(0%) [27m
 38:      0      0      0      0 PCI-MSI-edge    PCIe PME,
 [7m--More--(0%) [27m
 pciehp [K
 [7m--More--(0%) [27m
 39:      0      0      0      0 PCI-MSI-edge    PCIe PME,
 [7m--More--(0%) [27m
 pciehp [K
```

```
 [7m--More--(0%) [27m
40:      0      0      0      0  PCI-MSI-edge     PCIe PME,
 [7m--More--(0%) [27m
pciehp  [K
 [7m--More--(0%) [27m
41:      0      0      0      0  PCI-MSI-edge     PCIe PME,
 [7m--More--(0%) [27m
pciehp  [K
 [7m--More--(0%) [27m
42:      0      0      0      0  PCI-MSI-edge     PCIe PME,
 [7m--More--(0%) [27m
pciehp  [K
 [7m--More--(0%) [27m
43:      0      0      0      0  PCI-MSI-edge     PCIe PME,
 [7m--More--(0%) [27m
pciehp  [K
 [7m--More--(0%) [27m
44:      0      0      0      0  PCI-MSI-edge     PCIe PME,
 [7m--More--(0%) [27m
pciehp  [K
 [7m--More--(0%) [27m
45:      0      0      0      0  PCI-MSI-edge     PCIe PME,
 [7m--More--(0%) [27m
pciehp  [K
 [7m--More--(0%) [27m
46:      0      0      0      0  PCI-MSI-edge     PCIe PME,
 [7m--More--(0%) [27m
pciehp  [K
 [7m--More--(0%) [27m
47:      0      0      0      0  PCI-MSI-edge     PCIe PME,
 [7m--More--(0%) [27m
pciehp  [K
 [7m--More--(0%) [27m
48:      0      0      0      0  PCI-MSI-edge     PCIe PME,
 [7m--More--(0%) [27m
pciehp  [K
 [7m--More--(0%) [27m
49:      0      0      0      0  PCI-MSI-edge     PCIe PME,
 [7m--More--(0%) [27m
pciehp  [K
 [7m--More--(0%) [27m
50:      0      0      0      0  PCI-MSI-edge     PCIe PME,
 [7m--More--(0%) [27m
pciehp  [K
 [7m--More--(0%) [27m
51:      0      0      0      0  PCI-MSI-edge     PCIe PME,
 [7m--More--(0%) [27m
pciehp  [K
```

[7m--More--(0%) [27m
52: 0 0 0 0 PCI-MSI-edge PCIe PME,
[7m--More--(0%) [27m
pciehp [K
[7m--More--(0%) [27m
53: 0 0 0 0 PCI-MSI-edge PCIe PME,
[7m--More--(0%) [27m
pciehp [K
[7m--More--(0%) [27m
54: 0 0 0 0 PCI-MSI-edge PCIe PME,
[7m--More--(0%) [27m
pciehp [K
[7m--More--(0%) [27m
55: 0 0 0 0 PCI-MSI-edge PCIe PME,
[7m--More--(0%) [27m
pciehp [K
[7m--More--(0%) [27m
56: 239 0 487 0 PCI-MSI-edge vmw_vmci
[7m--More--(0%) [27m
57: 0 0 0 0 PCI-MSI-edge vmw_vmci
[7m--More--(0%) [27m
NMI: 23 24 21 20 Non-maskable interrupts
[7m--More--(0%) [27m
LOC: 540969 536494 570032 519136 Local timer interrupts
[7m--More--(0%) [27m
SPU: 0 0 0 0 Spurious interrupts
[7m--More--(0%) [27m
PMI: 23 24 21 20 Performance monitoring inter
[7m--More--(0%) [27m
rupts [K
[7m--More--(0%) [27m
IWI: 8395 7933 9488 8125 IRQ work interrupts
[7m--More--(0%) [27m
RTR: 0 0 0 0 APIC ICR read retries
[7m--More--(0%) [27m
RES: 329197 343534 312066 319963 Rescheduling interrupts
[7m--More--(0%) [27m
CAL: 1516 1595 16137 15913 Function call interrupts
[7m--More--(0%) [27m
TLB: 26881 35379 26645 32861 TLB shootdowns
[7m--More--(0%) [27m
TRM: 0 0 0 0 Thermal event interrupts
[7m--More--(0%) [27m
THR: 0 0 0 0 Threshold APIC interrupts
[7m--More--(0%) [27m
DFR: 0 0 0 0 Deferred Error APIC interrup
[7m--More--(0%) [27m
ts [K

```
 [7m--More--(0%)  [27m
MCE:       0     0     0        0   Machine check exceptions
 [7m--More--(0%)  [27m
MCP:      13     13    13       13   Machine check polls
 [7m--More--(0%)  [27m
ERR:       0
 [7m--More--(0%)  [27m
MIS:       0
 [7m--More--(0%)  [27m
PIN:      0     0     0        0   Posted-interrupt notificatio
 [7m--More--(0%)  [27m
n event  [K
 [7m--More--(0%)  [27m
PIW:      0     0     0        0   Posted-interrupt wakeup even
 [7m--More--(0%)  [27m
t  [K
 ]777;notify;Command completed;more
/proc/interrupts   ]0;root@localhost:~    ]7;file://localhost.localdomain/root  [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/interrupts   ]0;root@localhost:~    ]7;file://localhost.localdomain/root  [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/interrupts   ]0;root@localhost:~    ]7;file://localhost.localdomain/root  [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/interrupts   ]0;root@localhost:~    ]7;file://localhost.localdomain/root  [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/interrupts   ]0;root@localhost:~    ]7;file://localhost.localdomain/root  [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/interrupts   ]0;root@localhost:~    ]7;file://localhost.localdomain/root  [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/interrupts   ]0;root@localhost:~    ]7;file://localhost.localdomain/root  [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/interrupts   ]0;root@localhost:~    ]7;file://localhost.localdomain/root  [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/interrupts   ]0;root@localhost:~    ]7;file://localhost.localdomain/root  [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/interrupts   ]0;root@localhost:~    ]7;file://localhost.localdomain/root  [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/interrupts   ]0;root@localhost:~    ]7;file://localhost.localdomain/root  [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/interrupts   ]0;root@localhost:~    ]7;file://localhost.localdomain/root  [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/interrupts   ]0;root@localhost:~    ]7;file://localhost.localdomain/root  [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/interrupts   ]0;root@localhost:~    ]7;file://localhost.localdomain/root  [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/interrupts   ]0;root@localhost:~    ]7;file://localhost.localdomain/root  [root@localhost ~]#
 ]777;notify;Command completed;more
/proc/interrupts   ]0;root@localhost:~    ]7;file://localhost.localdomain/root  [root@localhost ~]#
```

```
  ]777;notify;Command completed;more
/proc/interrupts    ]0;root@localhost:~    ]7;file://localhost.localdomain/root  [root@localhost ~]#
  ]777;notify;Command completed;more
/proc/interrupts    ]0;root@localhost:~    ]7;file://localhost.localdomain/root  [root@localhost ~]#
  ]777;notify;Command completed;more
/proc/interrupts    ]0;root@localhost:~    ]7;file://localhost.localdomain/root  [root@localhost ~]# exit
exit
```

Script done on Wed 17 Jan 2018 08:15:12 PM CST

2.3.1

```c
#include<stdio.h>
#include<math.h>

int main()
{
  int i,n,Sum=0,numbers;
  float Average;
  float Square;
  float Squareavg;

  printf("\nPlease Enter How many Number you want?\n");
  scanf("%d",&n);

  printf("\nPlease Enter the numbers:\n");
  for(i=0;i<n;++i)
  {
    scanf("%d",&numbers);
    Square = Square +sqrt(numbers);
    Sum = Sum +numbers;
  }

  Average = Sum/n;
  Squareavg = Square/n;

  printf("\nSum of the %d Numbers = %d",n, Sum);
  printf("\nAverage of the %d Numbers = %.2f",n, Average);
  printf("\nThe Average of the %d Square Roots = %.2f",n, Squareavg);

  return 0;
}
```

2.3.2

I compiled my code within Emacs.

2.3.3

Completed successfully

2.3.4

Script started on Fri 19 Jan 2018 06:07:30 PM CST

]777;notify;Command completed;gdb

simple   ]0;root@localhost:~/Desktop/project1   ]7;file://localhost.localdomain/root/Desktop/project1   [?1034h

[root@localhost project1]# gcc -g -lm -o simpl;e   [K   [Ke simple.c

]777;notify;Command completed;gcc -g -lm -o simple

simple.c   ]0;root@localhost:~/Desktop/project1   ]7;file://localhost.localdomain/root/Desktop/project1 [root@l

ocalhost project1]# gdb simple

[?1034hGNU gdb (GDB) Red Hat Enterprise Linux 7.6.1-100.el7

Copyright (C) 2013 Free Software Foundation, Inc.

License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>

This is free software: you are free to change and redistribute it.

There is NO WARRANTY, to the extent permitted by law. Type "show copying"

and "show warranty" for details.

This GDB was configured as "x86_64-redhat-linux-gnu".

For bug reporting instructions, please see:

<http://www.gnu.org/software/gdb/bugs/>...

Reading symbols from /root/Desktop/project1/simple...done.

warning: File "/root/Desktop/project1/.gdbinit" auto-loading has been declined by your `auto-load safe-path' set
to "$debugdir:$datadir/auto-load:/usr/bin/mono-gdb.py".

To enable execution of this file add

        add-auto-load-safe-path /root/Desktop/project1/.gdbinit

line to your configuration file "/root/.gdbinit".

To completely disable this security protection add

        set auto-load safe-path /

line to your configuration file "/root/.gdbinit".

For more information about this security protection see the

"Auto-loading safe path" section in the GDB manual. E.g., run from the shell:

        info "(gdb)Auto-loading safe path"

(gdb) run

Starting program: /root/Desktop/project1/simple

Please Enter How many Number you want?

5

Please Enter the numbers:

3

4

5

6

3

Sum of the 5 Numbers = 21

Average of the 5 Numbers = 4.00

The Average of the 5 Square Roots = 2.03[Inferior 1 (process 89991) exited normally]

Missing separate debuginfos, use: debuginfo-install glibc-2.17-196.el7_4.2.x86_64

(gdb) b 30

Breakpoint 1 at 0x400800: file simple.c, line 30.

(gdb) r

Starting program: /root/Desktop/project1/simple

Please Enter How many Number you want?

2

Please Enter the numbers:

3

4

Sum of the 2 Numbers = 7

Average of the 2 Numbers = 3.00

Breakpoint 1, main () at simple.c:30

30   }

(gdb) n

0x00007ffff7737c05 in __libc_start_main () from /lib64/libc.so.6

(gdb) s

Single stepping until exit from function __libc_start_main,

which has no line number information.

The Average of the 2 Square Roots = 1.87[Inferior 1 (process 90003) exited normally]

(gdb) c

The program is not being run.

(gdb) step

The program is not being run.

(gdb) r

Starting program: /root/Desktop/project1/simple

Please Enter How many Number you want?

step

Please Enter the numbers:

Sum of the 4195840 Numbers = 0

Average of the 4195840 Numbers = 0.00

Breakpoint 1, main () at simple.c:30

30   }

(gdb) nm   [K

0x00007ffff7737c05 in __libc_start_main () from /lib64/libc.so.6

(gdb) b 5

Breakpoint 2 at 0x4006f5: file simple.c, line 5.

(gdb) step

Single stepping until exit from function __libc_start_main,

which has no line number information.

The Average of the 4195840 Square Roots = 0.00[Inferior 1 (process 90018) exited normally]

(gdb) next

The program is not being run.

(gdb) run

Starting program: /root/Desktop/project1/simple

Breakpoint 2, main () at simple.c:6

6   int i,n,Sum=0,numbers;

(gdb) next

11   printf("\nPlease Enter How many Number you want?\n");

(gdb) n

Please Enter How many Number you want?

12   scanf("%d",&n);

(gdb) n

n   3

14 printf("\nPlease Enter the numbers:\n");

(gdb) 2

Undefined command: "2". Try "help".

(gdb) n

Please Enter the numbers:

15 for(i=0;i<n;++i)

(gdb) n   [Kn   [K3

Undefined command: "3". Try "help".

(gdb) n

17 scanf("%d",&numbers);

(gdb) n

3

18 Square = Square +sqrt(numbers);

(gdb) c

Continuing.

c

Sum of the 3 Numbers = 9

Average of the 3 Numbers = 3.00

Breakpoint 1, main () at simple.c:30

30 }

(gdb) exit

Quit

(gdb) q

A debugging session is active.

Inferior 1 [process 90027] will be killed.

Quit anyway? (y or n) y

 ]777;notify;Command completed;gdb
simple   ]0;root@localhost:~/Desktop/project1   ]7;file://localhost.localdomain/root/Desktop/project1 [root@localhost project1]# exit

exit

Script done on Fri 19 Jan 2018 06:15:27 PM CST

Conclusion

I think that this assignment was a great way to kick off the class. I have always been interested in operating systems and I cannot wait to see what else this class has in store. I have listed a few things I ran into during this project. I am mentioning them in case they are something I need to watch out for next time.

During my boot I received this error. I did a memory check and everything seemed fine.

During my hdparm check I received this error. Could this be something that happens if you are using a VMWare?