

Docker 実習 8

1. 教科書 P150 を参考にして AWS Ubuntu 上に Debian コンテナを構築してください。
Debian コンテナを構築後、C 言語コンパイラ(gcc)とエディタ vim をインストールして、C 言語のソースプログラムを作成(hello.c)してコンパイル実行してください。

📎 コンテナの構築過程画面、gcc と vim のインストール過程、C 言語のコンパイル実行過程をキャプチャして画像を貼り付けて提出してください。

```
ubuntu@ip-172-31-3-122:~/docker/debian$ docker compose up -d
[+] Running 2/2
 ? debian Pulled
 ? 1339eaac5b67 Pull complete
[+] Running 2/2
 ? Network debian_default Created
 ? Container debian-debian-1 Started
ubuntu@ip-172-31-3-122:~/docker/debian$ docker
ubuntu@ip-172-31-3-122:~/docker/debian$ docker
```

```
ubuntu@ip-172-31-3-122:~/docker/debian$ docker compose exec debian /bin/bash
root@1907ce146692:/#
root@1907ce146692:/#
root@1907ce146692:/#
root@1907ce146692:/# apt update
Get:1 http://deb.debian.org/debian bullseye InRelease [116 kB]
Get:2 http://deb.debian.org/debian bullseye-updates InRelease [44.1 kB]
Get:3 http://security.debian.org/debian-security bullseye-security InRelease [48.4 kB]
Get:4 http://deb.debian.org/debian bullseye/main amd64 Packages [8183 kB]
Get:5 http://deb.debian.org/debian bullseye-updates/main amd64 Packages [14.6 kB]
Get:6 http://security.debian.org/debian-security bullseye-security/main amd64 Packages [236 kB]
Fetched 8642 kB in 2s (5184 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
20 packages can be upgraded. Run 'apt list --upgradable' to see them.
root@1907ce146692:/#
root@1907ce146692:/# apt-get install vim
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libgpm2 vim-common vim-runtime xxd
Suggested packages:
  gpm ctags vim-doc vim-scripts
The following NEW packages will be installed:
  libgpm2 vim vim-common vim-runtime xxd
0 upgraded, 5 newly installed, 0 to remove and 20 not upgraded.
Need to get 8174 kB of archives.
After this operation, 36.9 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://deb.debian.org/debian bullseye/main amd64 xxd amd64 2:8.2.2434-3+deb11u1 [192 kB]
Get:2 http://deb.debian.org/debian bullseye/main amd64 vim-common all 2:8.2.2434-3+deb11u1 [226 kB]
```

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```
Processing triggers for libc-bin (2.31-13+deb11u3) ...
root@1907ce146692:/# apt-get install gcc
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  binutils binutils-common binutils-x86-64-linux-gnu cpp cpp-10 fontconfig-config fonts-dejavu-core gcc-10 libasan6 libatomic1 libbinutils libbrotli1
  libbsd0 libc-dev-bin libc-devtools libc6 libc6-dev libc6-i386 libcrypt-dev libctf-nobfd0 libctf0 libdeflate0 libexpat1 libfontconfig1 libfreetype6
  libgcc-10-dev libgd3 libgomp1 libisl23 libitm1 libjbig0 libjpeg62-turbo liblsan0 libmd0 libmpc3 libmpfr6 libnsl-dev libpng16-16 libquadmath0 libtiff5
  libtirpc-common libtirpc-dev libtirpc3 libtsan0 libubsan1 libwebp6 libx11-6 libx11-data libxau6 libxcb1 libxdmcp6 libxpm4 linux-libc-dev manpages
  manpages-dev sensible-utils ucf
Suggested packages:
  binutils-doc cpp-doc gcc-10-locales gcc-multilib make autoconf automake libtool flex bison gdb gcc-doc gcc-10-multilib gcc-10-doc glibc-doc libc-l10n
  locales libgd-tools man-browser
Recommended packages:
  libnss-nis libnss-nisplus
The following NEW packages will be installed:
  binutils binutils-common binutils-x86-64-linux-gnu cpp cpp-10 fontconfig-config fonts-dejavu-core gcc gcc-10 libasan6 libatomic1 libbinutils libbrotli1
  libbsd0 libc-dev-bin libc-devtools libc6 libc6-dev libc6-i386 libcrypt-dev libctf-nobfd0 libctf0 libdeflate0 libexpat1 libfontconfig1 libfreetype6 libgcc-10-dev
  libgd3 libgomp1 libisl23 libitm1 libjbig0 libjpeg62-turbo liblsan0 libmd0 libmpc3 libmpfr6 libnsl-dev libpng16-16 libquadmath0 libtiff5 libtirpc-dev
  libtsan0 libubsan1 libwebp6 libx11-6 libx11-data libxau6 libxcb1 libxdmcp6 libxpm4 linux-libc-dev manpages manpages-dev sensible-utils ucf
The following packages will be upgraded:
  libc6 libtirpc-common libtirpc3
3 upgraded, 55 newly installed, 0 to remove and 17 not upgraded.
Need to get 58.1 MB of archives.
After this operation, 193 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://security.debian.org/debian-security bullseye-security/main amd64 libtiff5 amd64 4.2.0-1+deb11u4 [290 kB]
Get:2 http://deb.debian.org/debian bullseye/main amd64 libc6 amd64 2.31-13+deb11u5 [2825 kB]
Get:3 http://security.debian.org/debian-security bullseye-security/main amd64 linux-libc-dev amd64 5.10.162-1 [1576 kB]
Get:4 http://deb.debian.org/debian bullseye/main amd64 libtirpc-common all 1.3.1-1+deb11u1 [13.5 kB]
Get:5 http://deb.debian.org/debian bullseye/main amd64 libtirpc3 amd64 1.3.1-1+deb11u1 [84.1 kB]
Get:6 http://deb.debian.org/debian bullseye/main amd64 sensible-utils all 0.0.14 [14.8 kB]
```

```
root@1907ce146692:/# mkdir clang
root@1907ce146692:/#
root@1907ce146692:/#
root@1907ce146692:/#
root@1907ce146692:/# cd clang
root@1907ce146692:/clang#
root@1907ce146692:/clang#
root@1907ce146692:/clang# vi hello.c
root@1907ce146692:/clang#
root@1907ce146692:/clang# gcc hello.c -o hello
root@1907ce146692:/clang#
root@1907ce146692:/clang# ./hello
Hello World!root@1907ce146692:/clang# vi hello.c
root@1907ce146692:/clang#
root@1907ce146692:/clang#
root@1907ce146692:/clang#
root@1907ce146692:/clang# gcc hello.c -o hello
root@1907ce146692:/clang#
root@1907ce146692:/clang# ./hello
Hello World!
root@1907ce146692:/clang#
```