

NETWORKING & SYSTEM ADMINISTRATION LAB

Experiment No: 12

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Date: 14/05/2022

Aim

Learn about Cmake[make and Cmake]

Procedure

Create a folder and add all the project files into it
create a text file named as CmakeLists.txt and write all the list of project files to it
keep the format as follow:

```
cmake_minimum_required(VERSION 3.10)
project(MyProject VERSION 0.0.1)
add_executable(hello hello_world.cpp)
```

here hello_word is my project file

Create a build folder and change directroy to it

Now build the projcct:

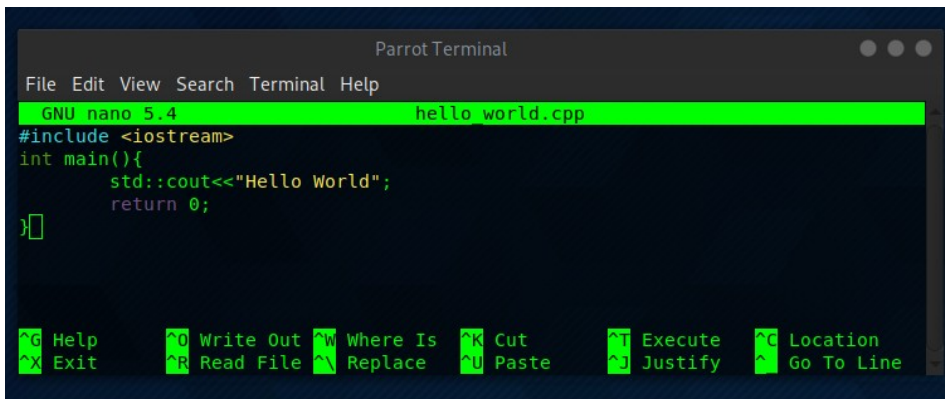
```
$ cmake ..
```

```
$ cmake --build .
```

and extecute the project:

```
./hello //my executable name mentioned in CMakeLists
```

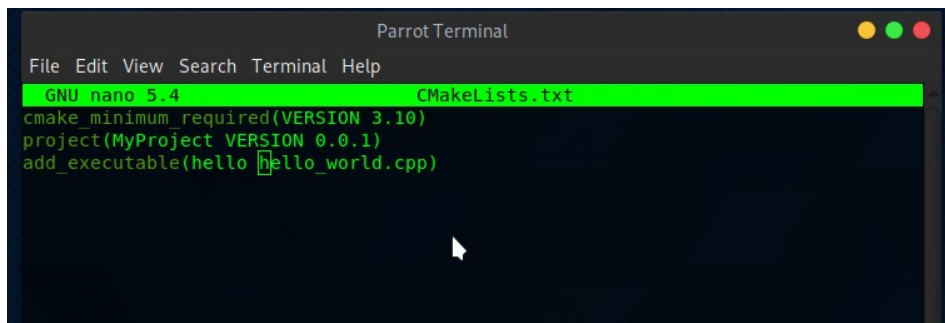
Output Screenshot



A screenshot of the Parrot Terminal window. The title bar says "Parrot Terminal". The menu bar includes "File", "Edit", "View", "Search", "Terminal", and "Help". The terminal content shows the GNU nano 5.4 editor editing a file named "hello_world.cpp". The code visible is:

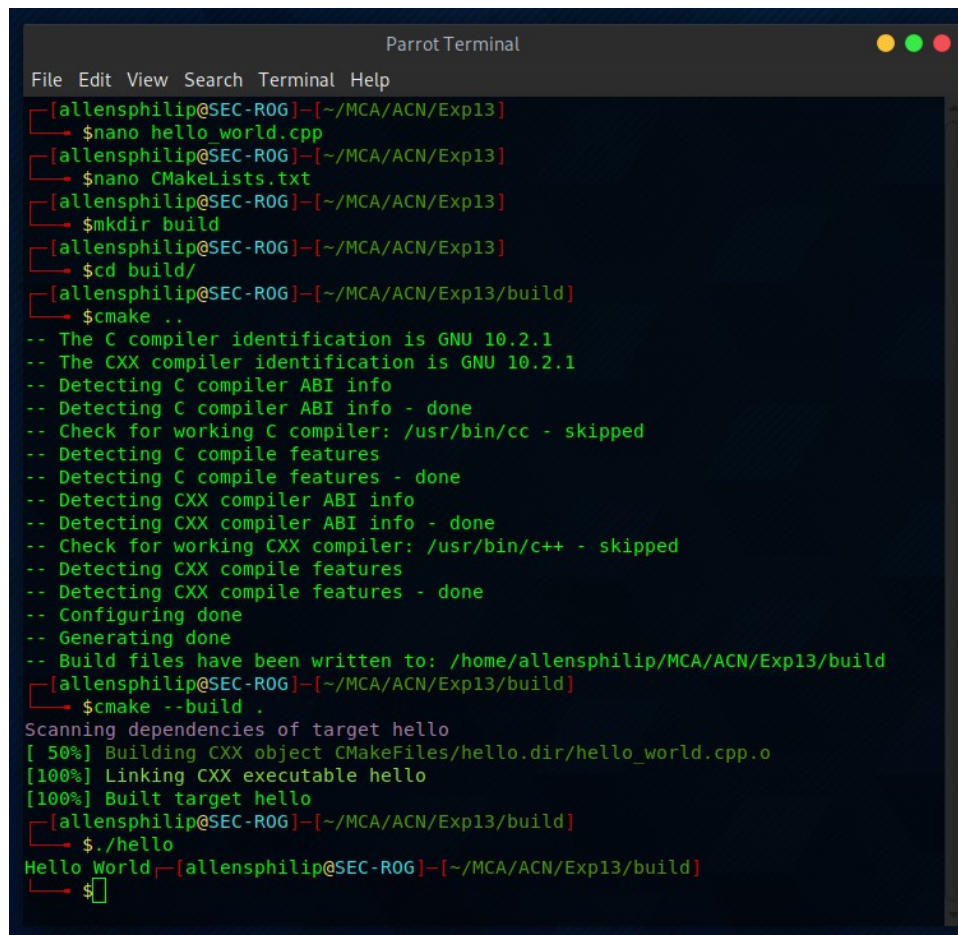
```
#include <iostream>
int main(){
    std::cout<<"Hello World";
    return 0;
}
```

 At the bottom of the terminal, there is a row of keyboard shortcuts: **^G** Help, **^O** Write Out, **^W** Where Is, **^K** Cut, **^T** Execute, **^C** Location, **^X** Exit, **^R** Read File, **^N** Replace, **^U** Paste, **^J** Justify, and **^L** Go To Line.



A screenshot of the Parrot Terminal window. The title bar says "Parrot Terminal". The menu bar includes "File", "Edit", "View", "Search", "Terminal", and "Help". The terminal content shows the GNU nano 5.4 editor editing a file named "CMakeLists.txt". The code visible is:

```
cmake_minimum_required(VERSION 3.10)
project(MyProject VERSION 0.0.1)
add_executable(hello hello_world.cpp)
```



A screenshot of the Parrot Terminal window showing the execution of CMake and the resulting program. The terminal content is as follows:

```
[allensphilip@SEC-R06]--[~/MCA/ACN/Exp13]
$ nano hello_world.cpp
[allensphilip@SEC-R06]--[~/MCA/ACN/Exp13]
$ nano CMakeLists.txt
[allensphilip@SEC-R06]--[~/MCA/ACN/Exp13]
$ mkdir build
[allensphilip@SEC-R06]--[~/MCA/ACN/Exp13]
$ cd build/
[allensphilip@SEC-R06]--[~/MCA/ACN/Exp13/build]
$ cmake ..
-- The C compiler identification is GNU 10.2.1
-- The CXX compiler identification is GNU 10.2.1
-- Detecting C compiler ABI info
-- Detecting C compiler ABI info - done
-- Check for working C compiler: /usr/bin/cc - skipped
-- Detecting C compile features
-- Detecting C compile features - done
-- Detecting CXX compiler ABI info
-- Detecting CXX compiler ABI info - done
-- Check for working CXX compiler: /usr/bin/c++ - skipped
-- Detecting CXX compile features
-- Detecting CXX compile features - done
-- Configuring done
-- Generating done
-- Build files have been written to: /home/allensphilip/MCA/ACN/Exp13/build
[allensphilip@SEC-R06]--[~/MCA/ACN/Exp13/build]
$ cmake --build .
Scanning dependencies of target hello
[ 50%] Building CXX object CMakeFiles/hello.dir/hello_world.cpp.o
[100%] Linking CXX executable hello
[100%] Built target hello
[allensphilip@SEC-R06]--[~/MCA/ACN/Exp13/build]
$ ./hello
Hello World [allensphilip@SEC-R06]--[~/MCA/ACN/Exp13/build]
$
```