OSG202 LAB 01

ASSIGNMENT REPORT

Installing the Fedora OS on a virtual machine

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Class	SE1602

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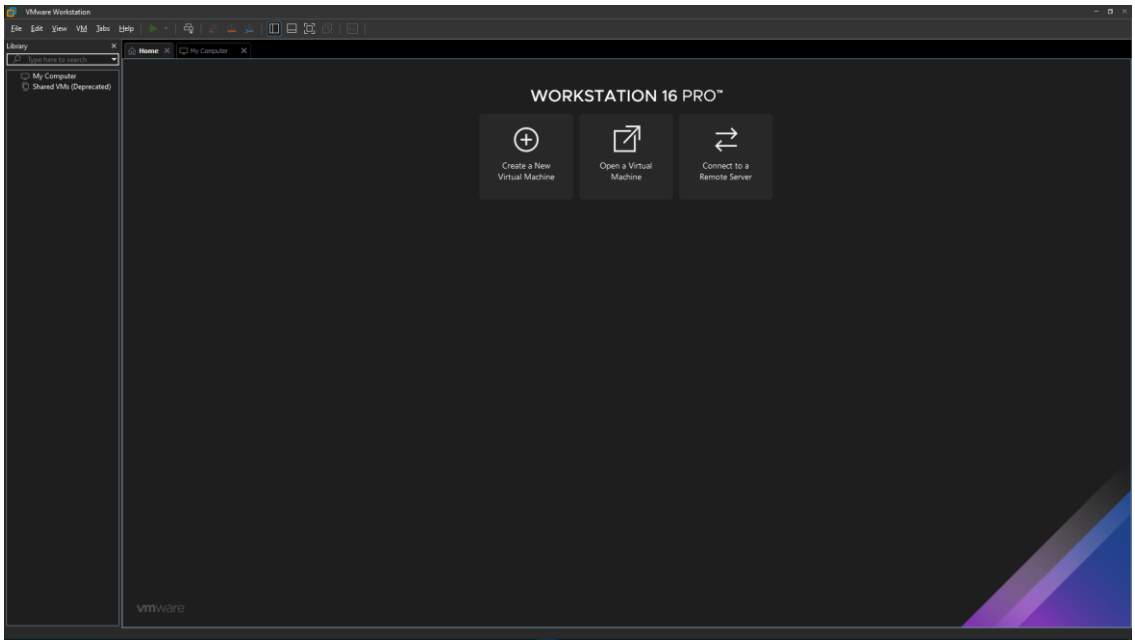
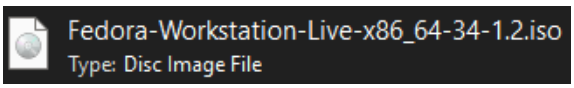
1. Install Fedora 34

1.1. Preparation

1.1.1. Get the VMWare Workstation 16.0 installation (download from its website)



1.1.2. Prepare the ISO file of Fedora 34



1.1.3. A disk space that store all needed file of the Fedora on a disk (remains greater than 10GB empty space)

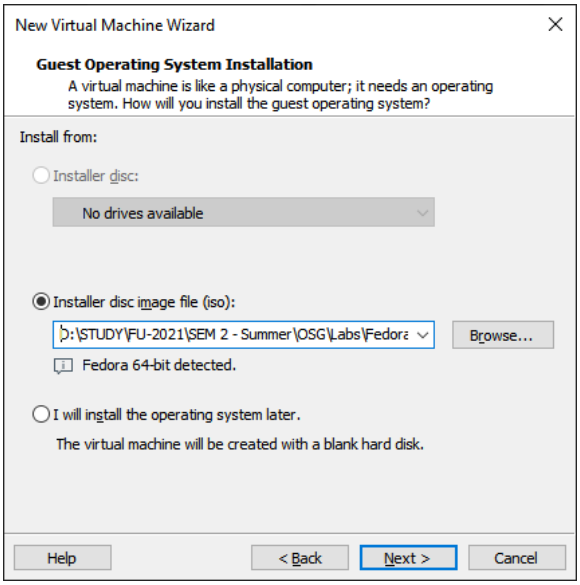
My setup space *D:\STUDY\2021\SEM 2 - Summer\OSG\Labs\LAB_01*

1.2. Install the Fedora 34

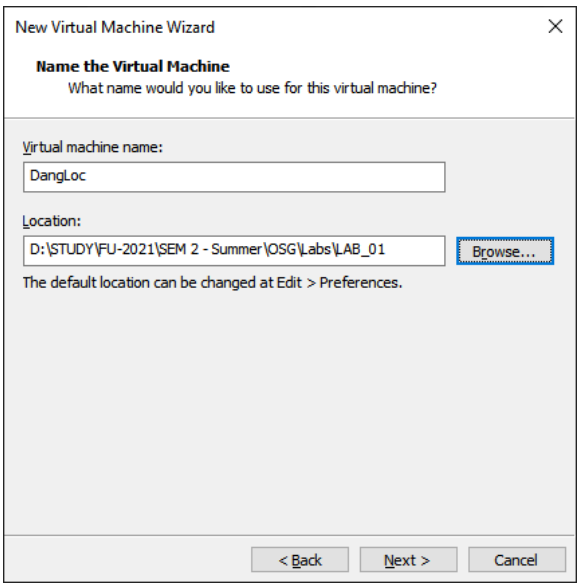
1.2.1. Starting setup the Fedora by click on **Create a New Virtual Machine**

Choose **Custom (Advanced)** → Click **Next**

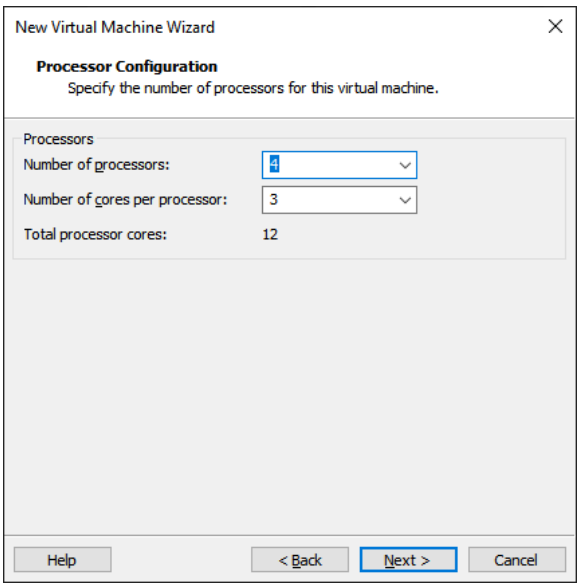
1.2.2. Browse the ISO file of the Fedora 34



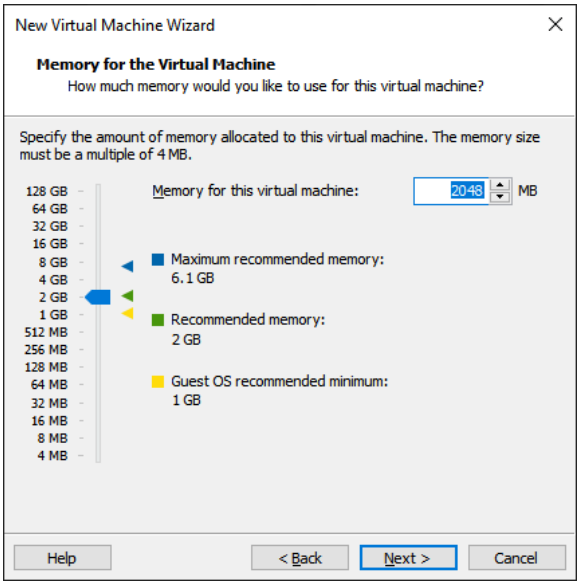
1.2.3. Choose a VM name and specify the OS's storing folder



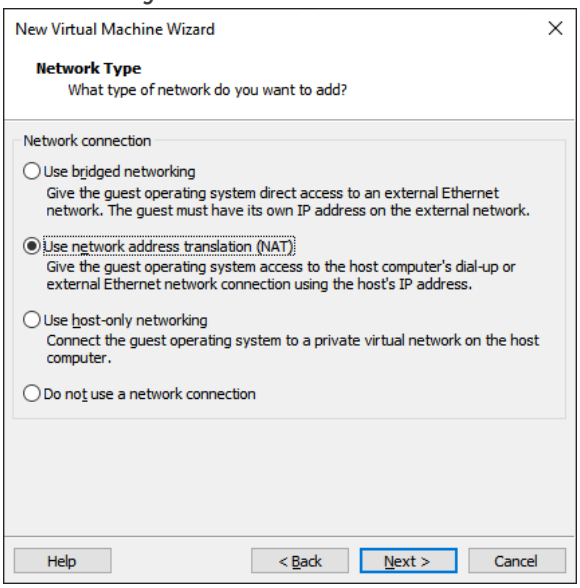
1.2.4. I set 4 processors and 3 cores per processor because I want the OS to perform multitask faster and more smooth



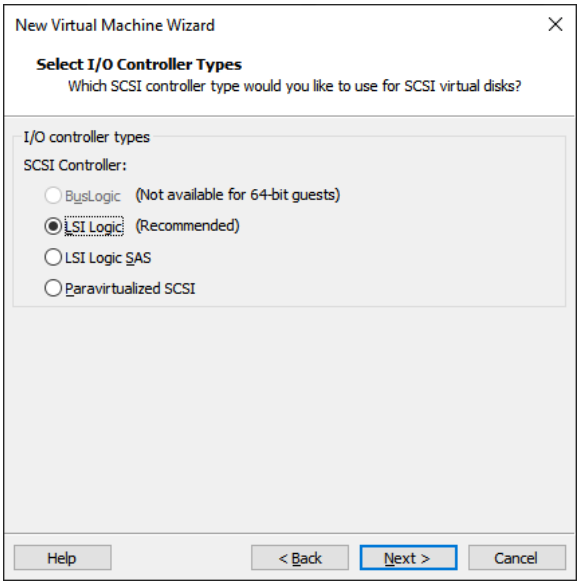
1.2.5. Specify the RAM capacity of the VM, I set is as default (2048MB)



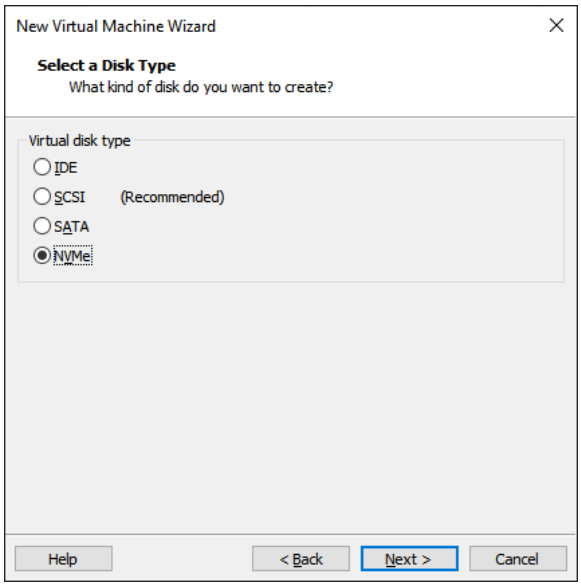
1.2.6. I choose NAT option for easy Internet connect without domain configuring



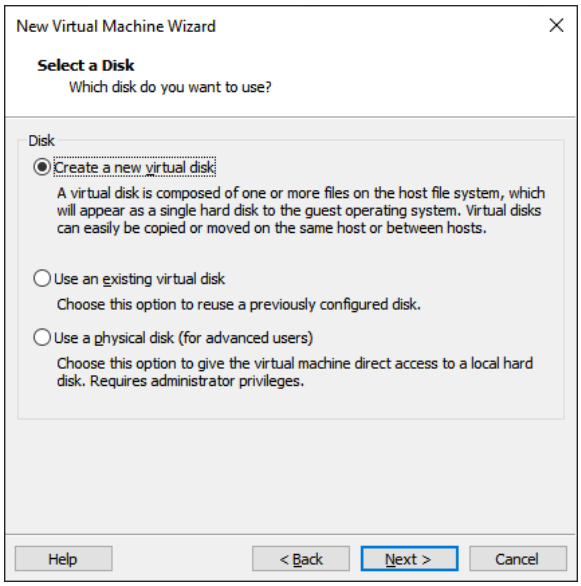
1.2.7. I choose LSI Logic as a type of IO controller since it was recommended



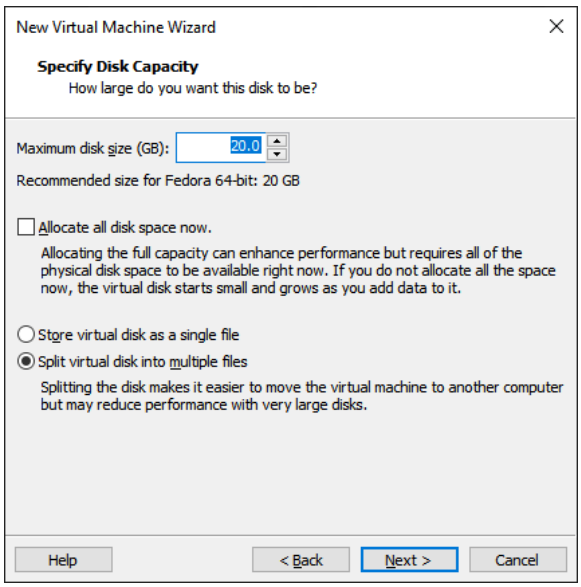
1.2.8. As my computer use NVMe SSD, I decided to choose NVMe disk type for conformity



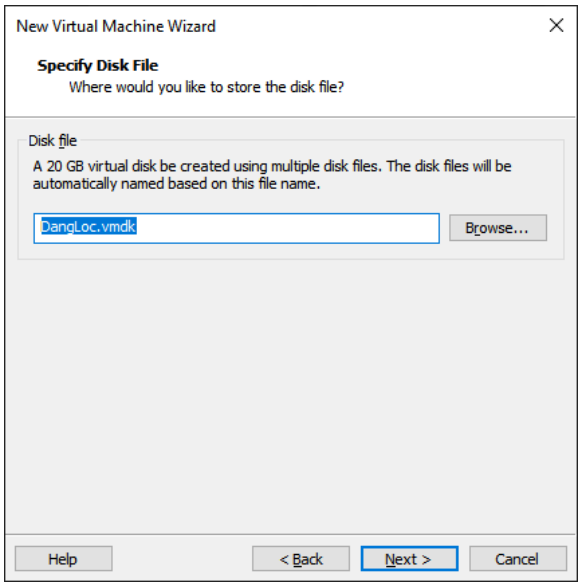
1.2.9. Tick to the Create a new virtual disk option (it's a file only on the physical disk)

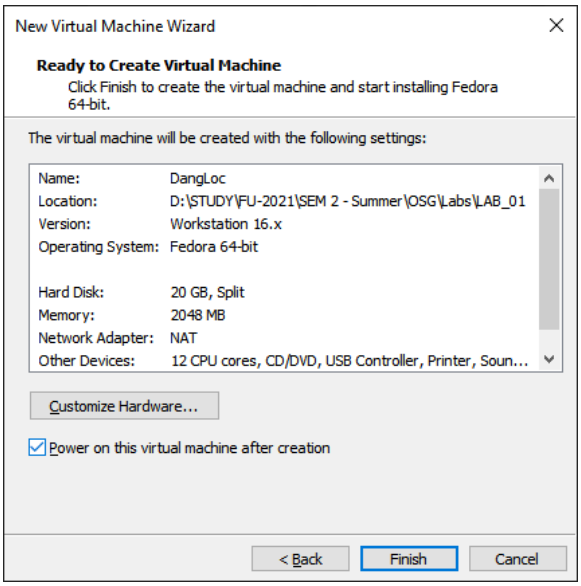


1.2.10. Specify the maximum disk size



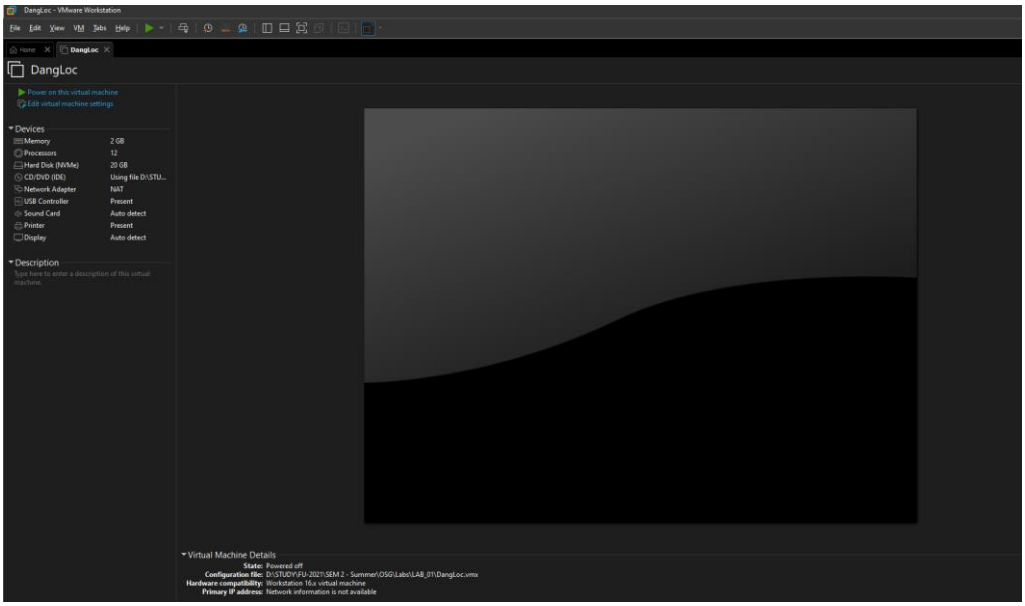
1.2.8. The next 2 steps, I left them as default → Tick on **Finish**

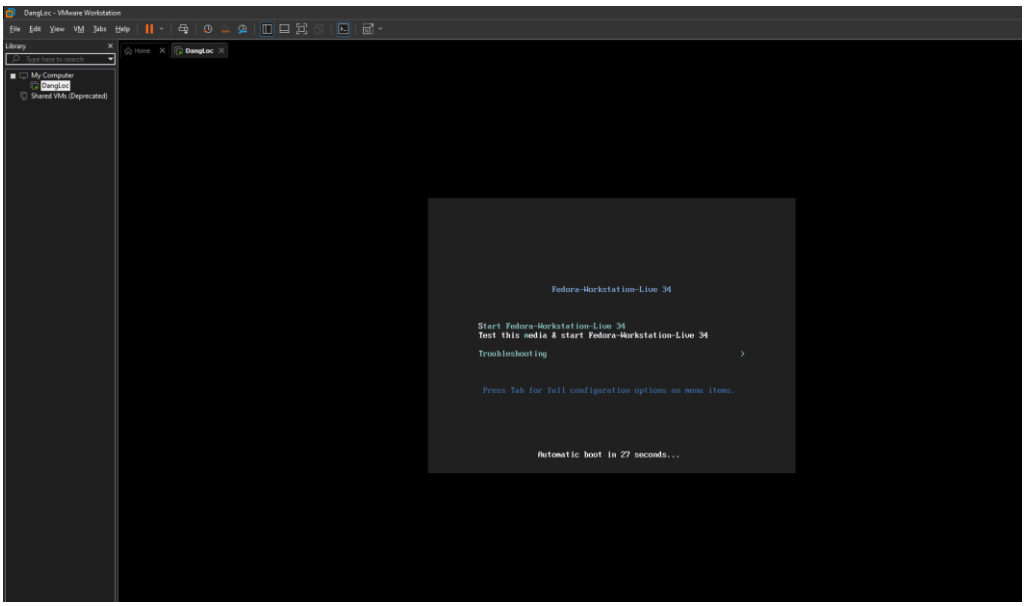




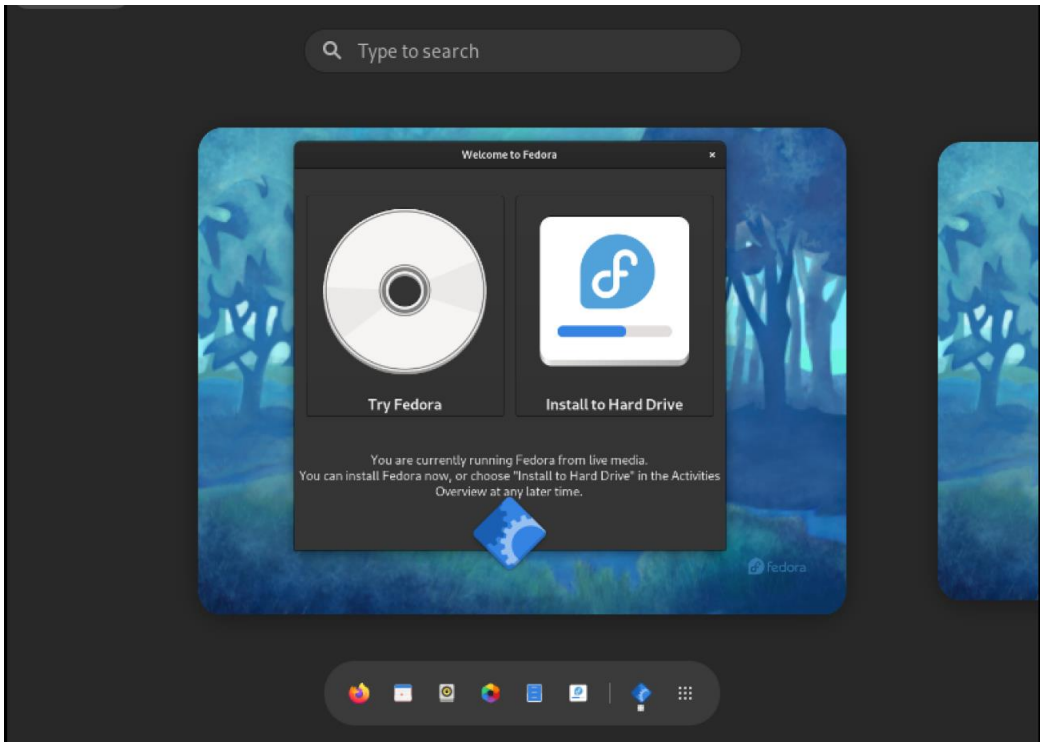
I choose **Power on this virtual machine after creation for**
Hence, the VM will be created and it will start instantly after that.

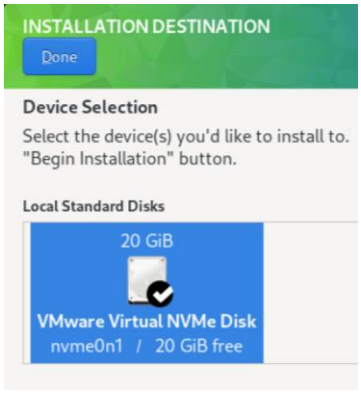
The VM data after íntallation

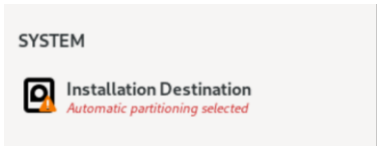




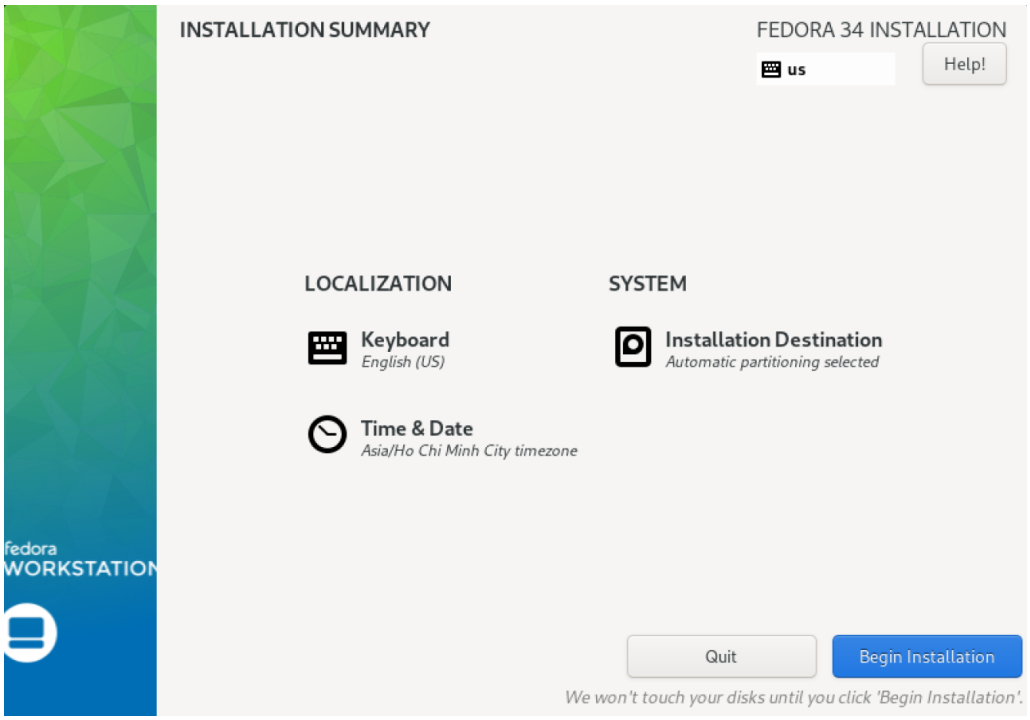
1.2.9. After the VM powered on, the final step of installation is installing it to Hard Drive



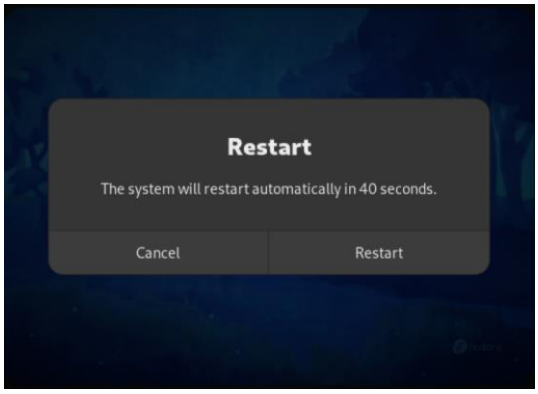




The progress required me to choose a destination when installFedora to Hard Drive, and I choose a Local standards disk I have already set up in the earlier phases.



1.2.9. The installation is finish, Fedora require restart to jump in setup



The installation progress is finished and it suggested that I reboot the machine to complete some last step s like: set user name and password, choose a network, another personal services, etc.

The next slides show the final setup interface and the GUI of the Fedora 34 I have installed completely.

Setup

Welcome to Fedora 34!

Setup will guide you through making an account and enabling some features. We'll have you up and running in no time.

Start Setup

Previous | About You | Next

DL

About You

We need a few details to complete setup.

Full Name: Dang Loc

Username: dangloc

This will be used to name your home folder and can't be changed.

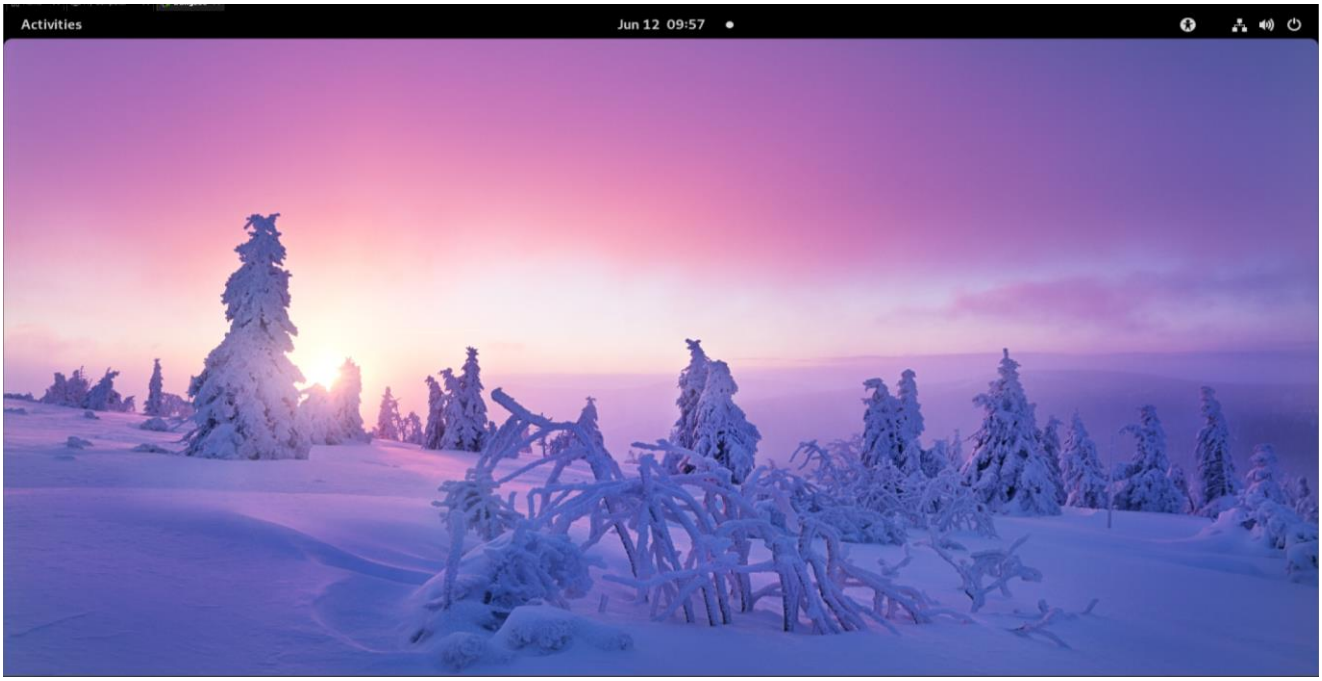
Setup Complete

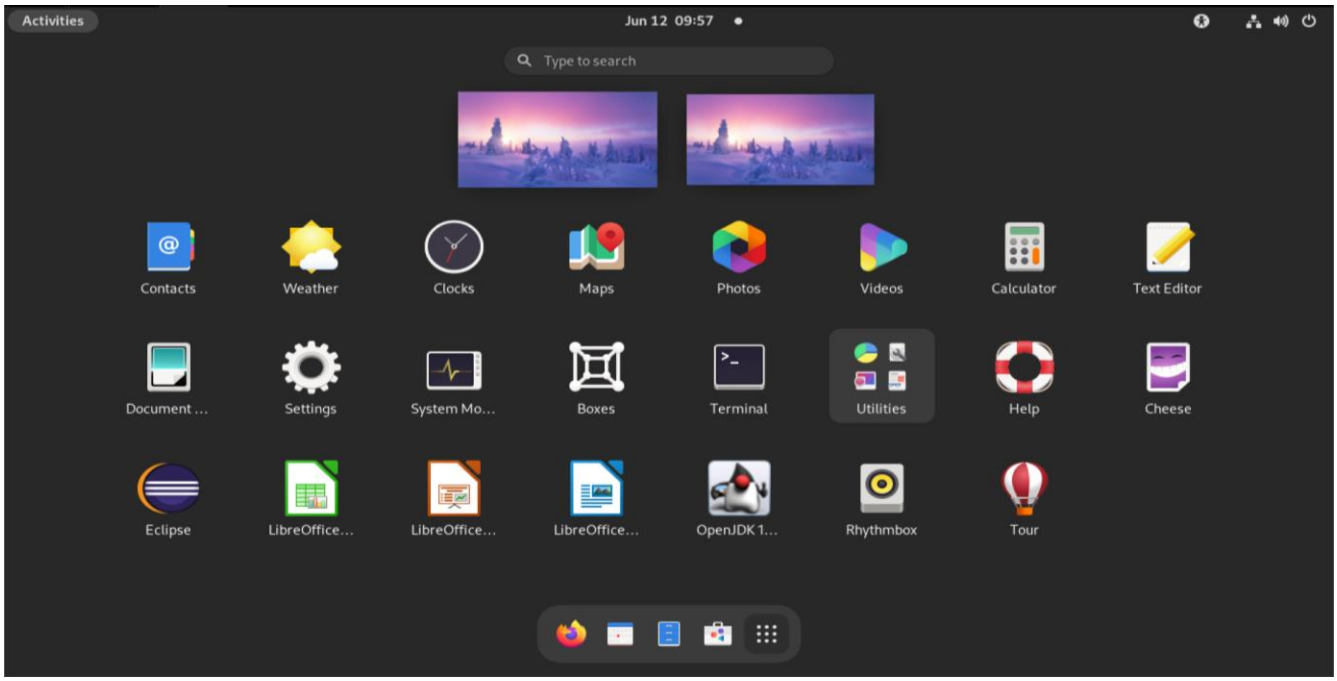
All done!

Fedora is ready to be used. We hope that you love it!

Start Using Fedora

1.2.10. Fedora 34 GUI



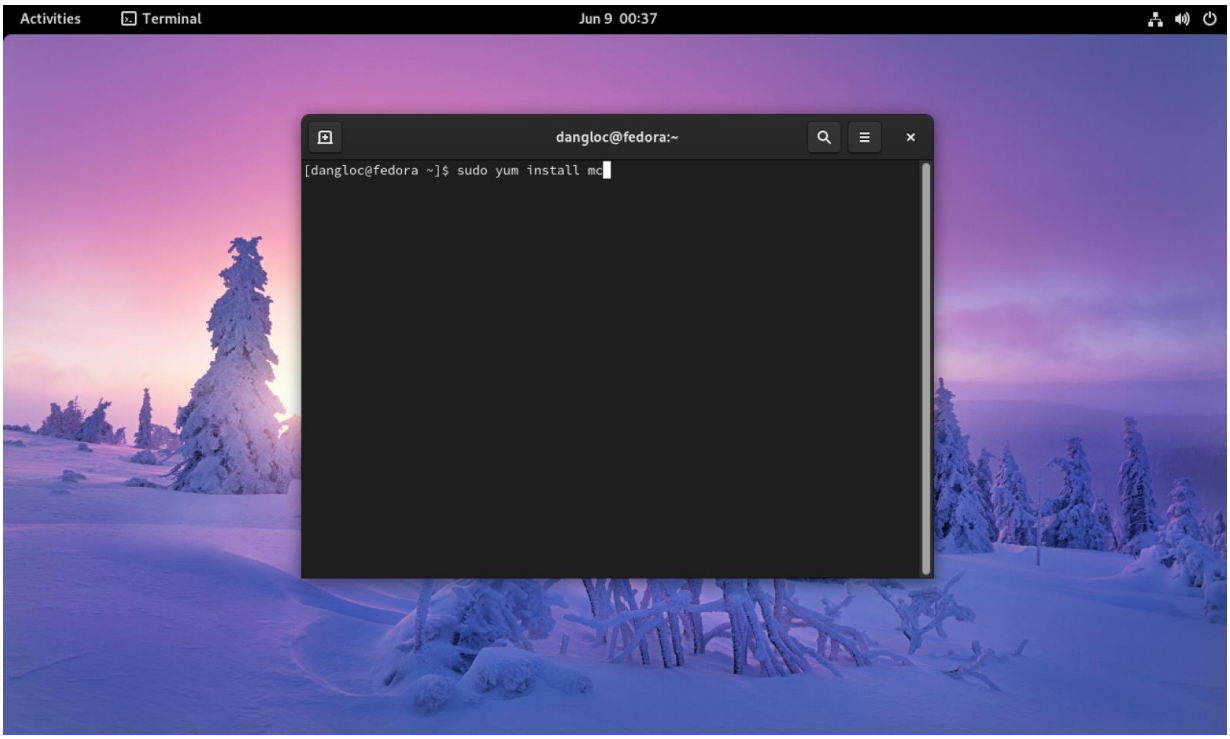


2. Install and use the MC

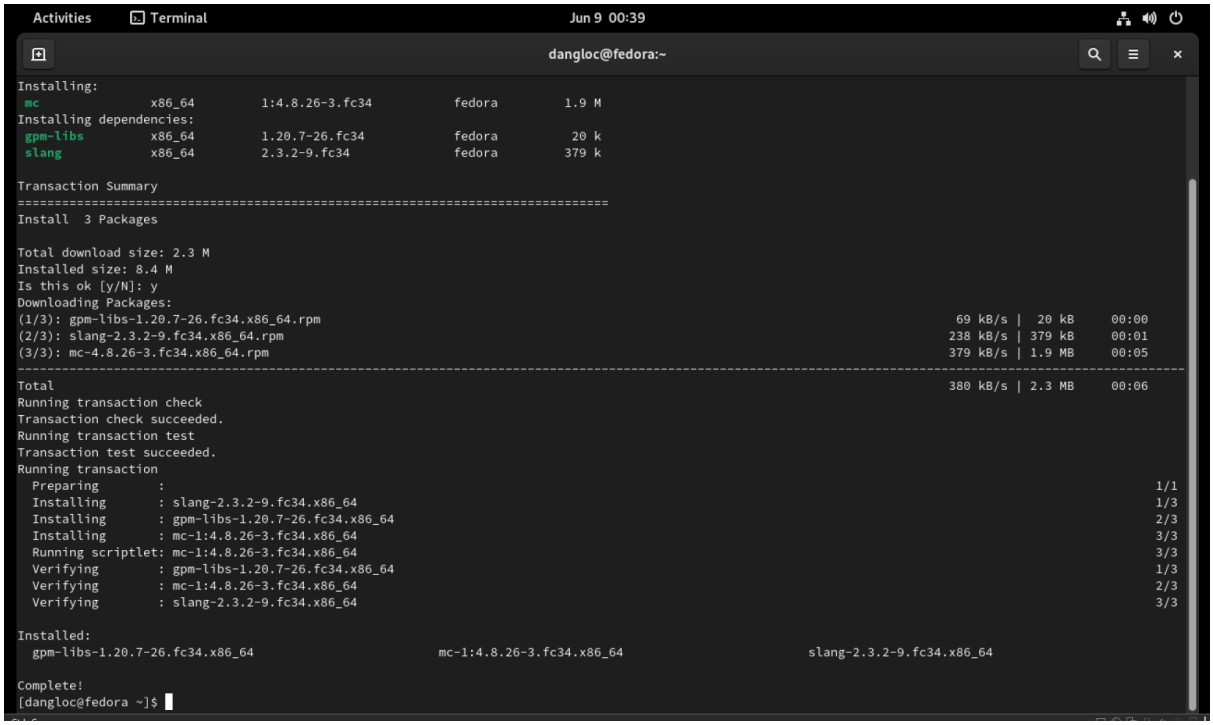
2.1. Use YUM to install package

I use YUM to install Midnight Commander package

YUM is the primary tool for getting, installing, deleting, querying, and managing Red Hat Enterprise Linux RPM software packages from official Red Hat software repositories.

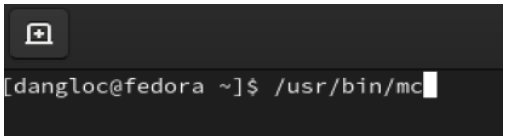


The installation has been completed!



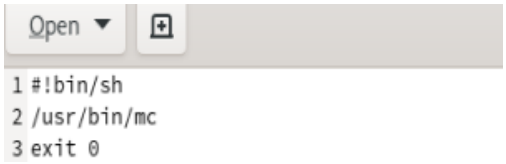
The package is located at /usr/bin (default)

The **MC** run only in the console mode, so I run it in Terminal window using command primts as shown below

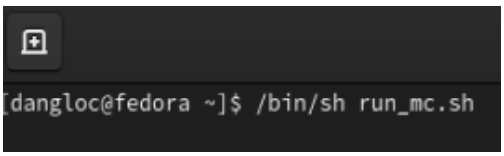


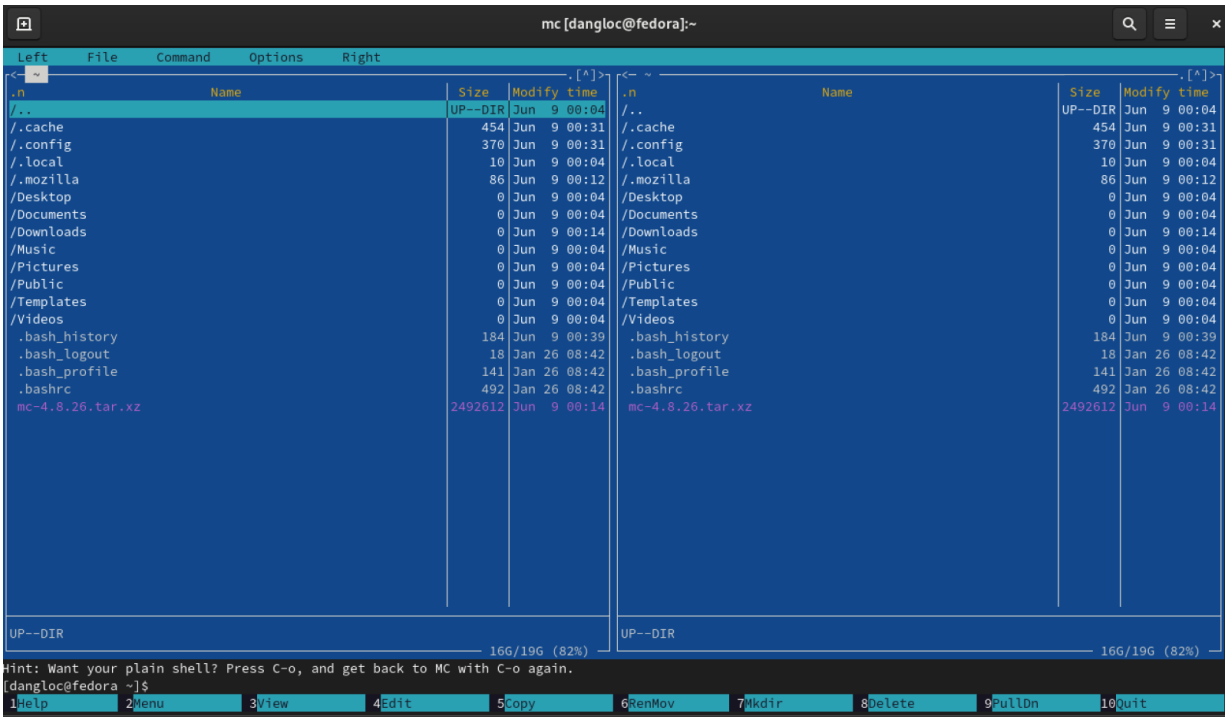
OR

Create a script file to run the MC easily



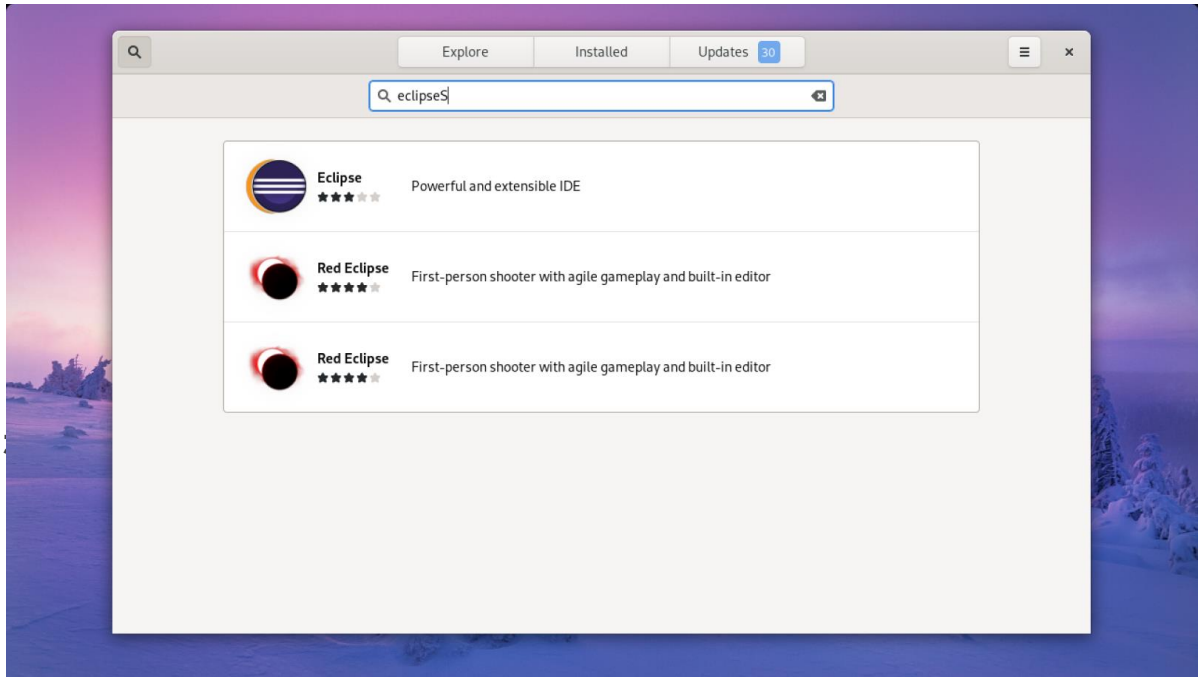
→

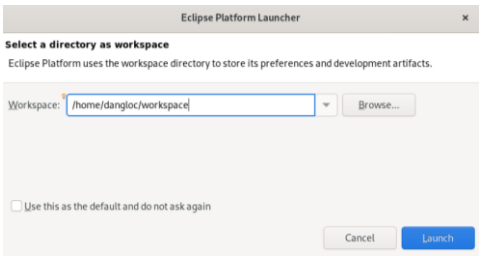




3. Install the Eclipse for C/C++

3.1. Find and install Eclipse IDE from Software Browser of Fedora 34

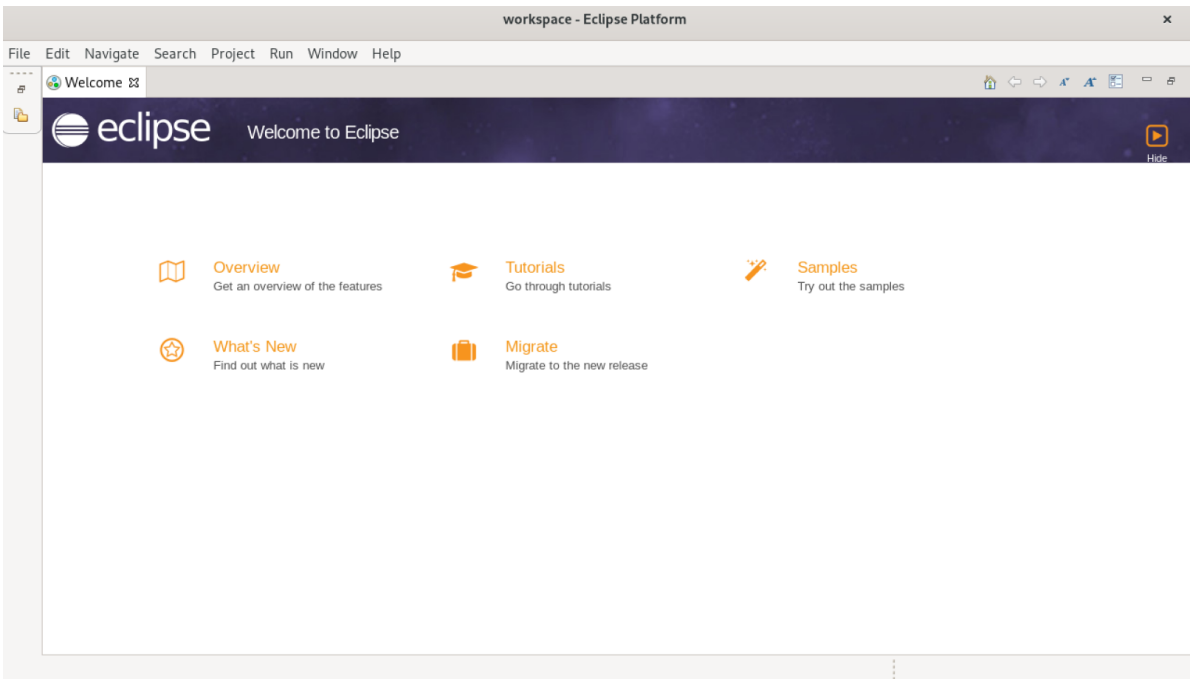




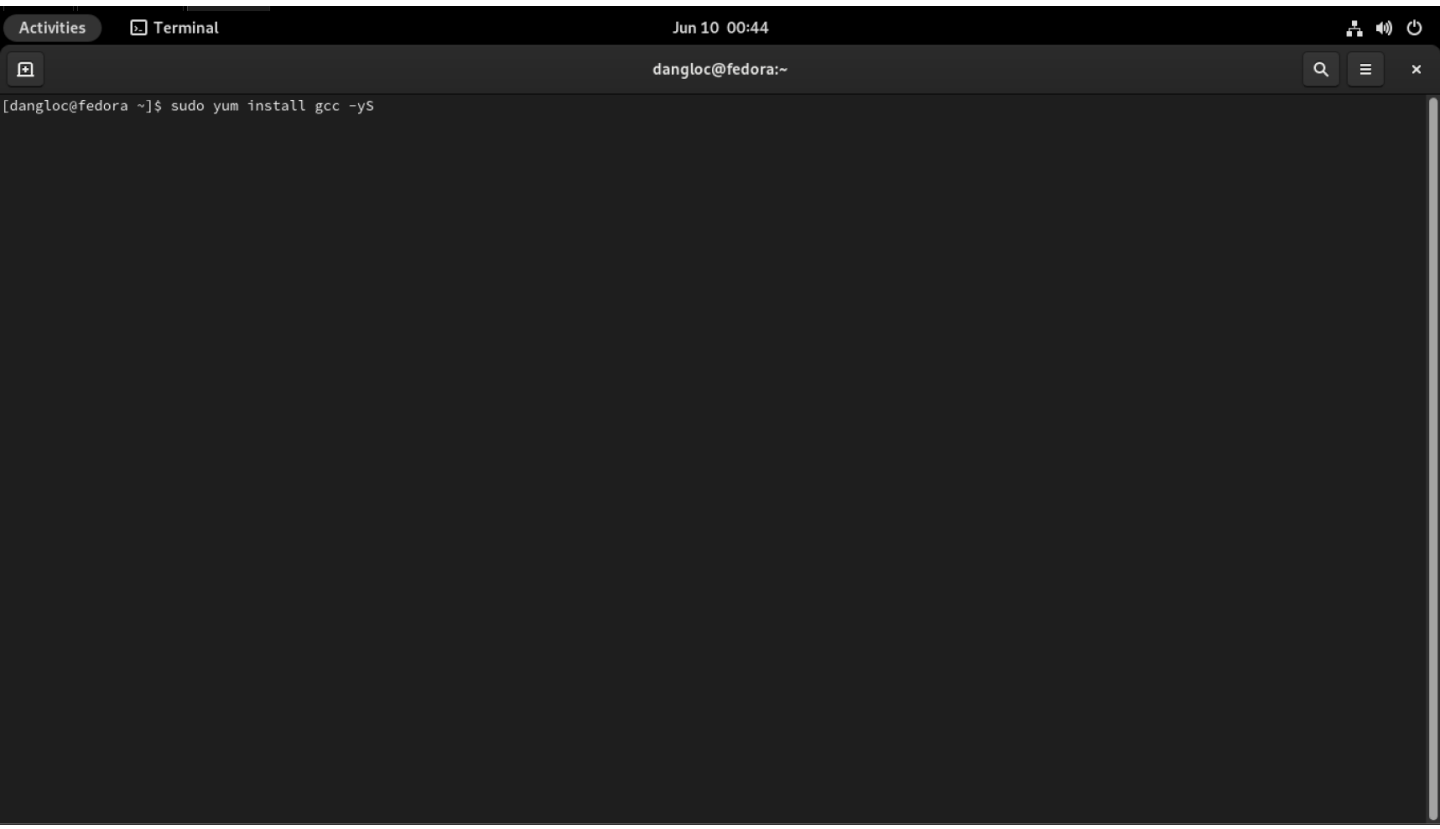
I search for Eclipse IDE and luckily the Software Browser of Fedora 34 already had got the install file.

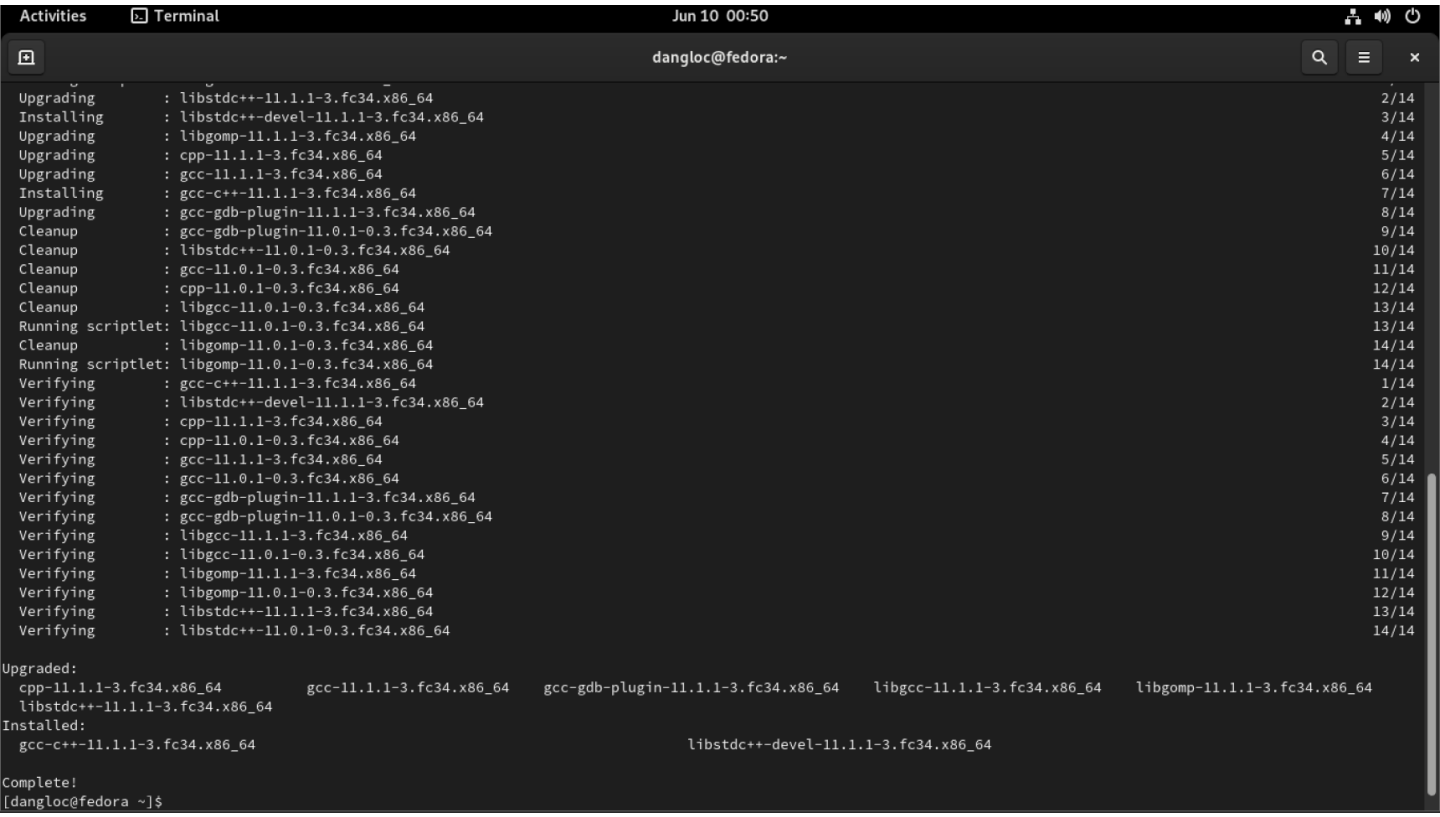
Installation complete and I choose my default workspace.

Below is the GUI of welcome page of Eclipse



The step before just install the IDE without any compiler.
To prepare for coding in C/C++ with Eclipse, I have to install MinGW GCC compiler.
(As shown below)

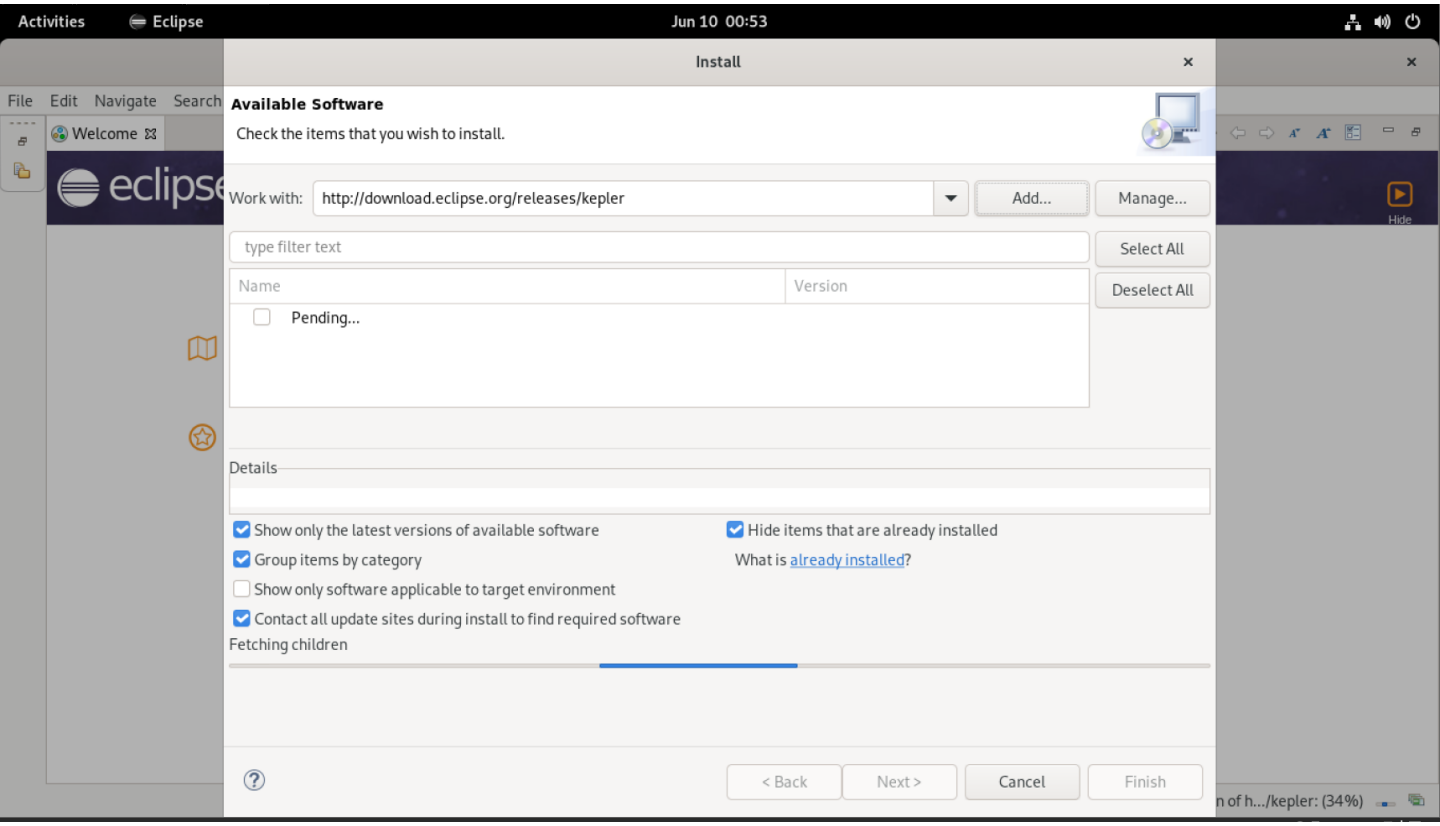


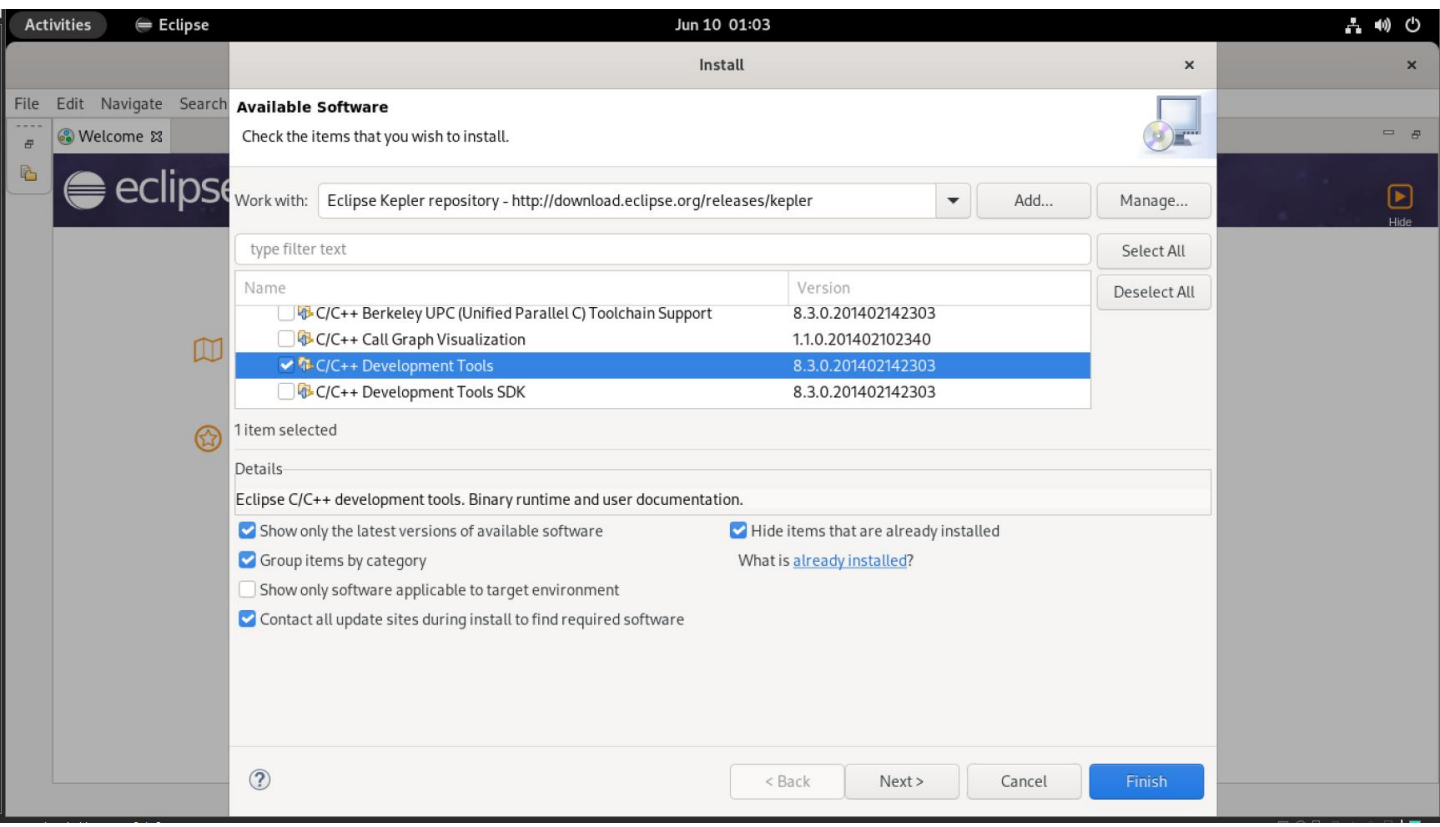


The GCC compiler had already installed on the machine.

Then I have to install a C/C++ Development Tools (CDT) inside Eclipse IDE.

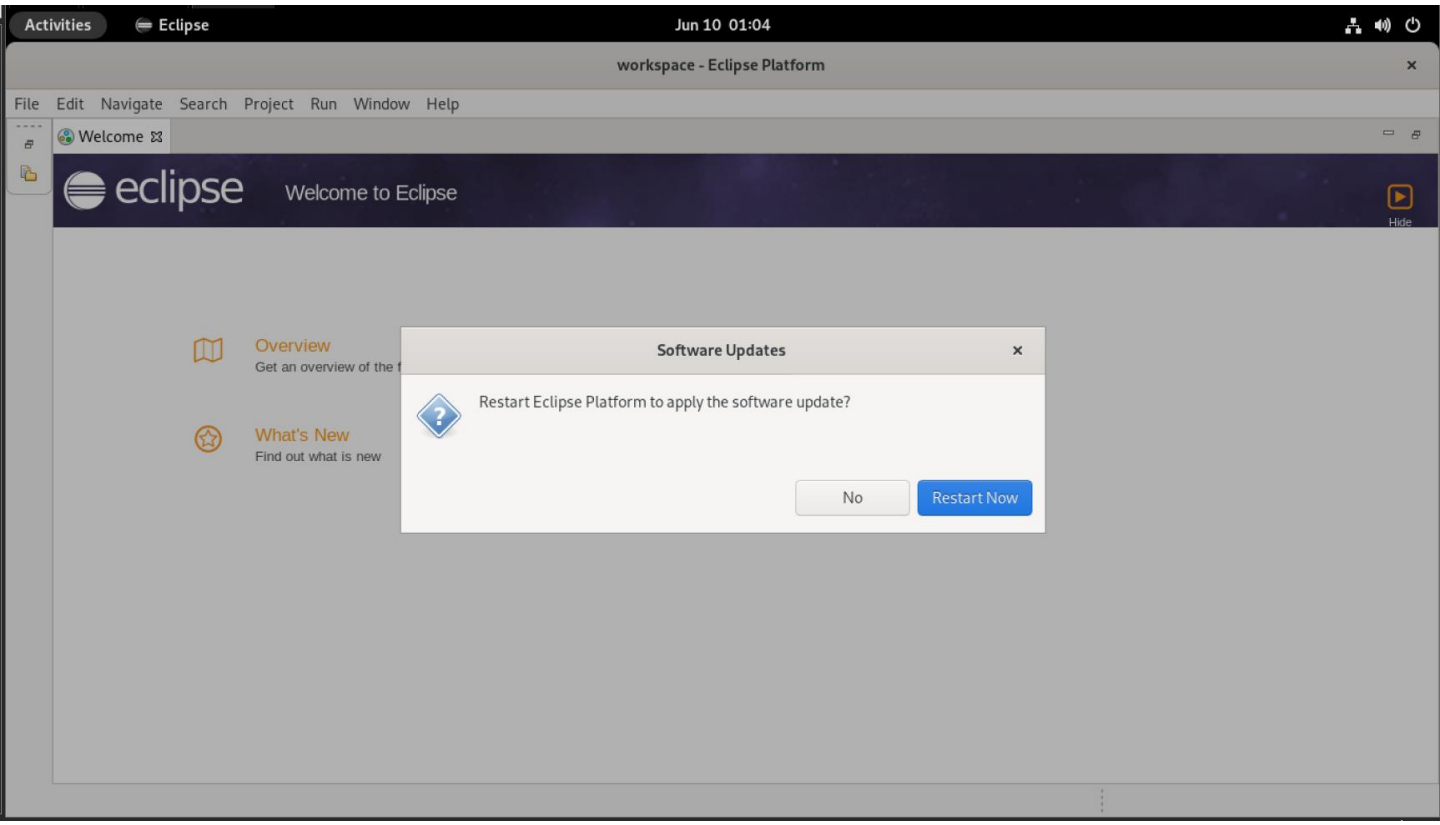
It was done by using a plug-in in Kepler packages (through install new software inside Eclipse.



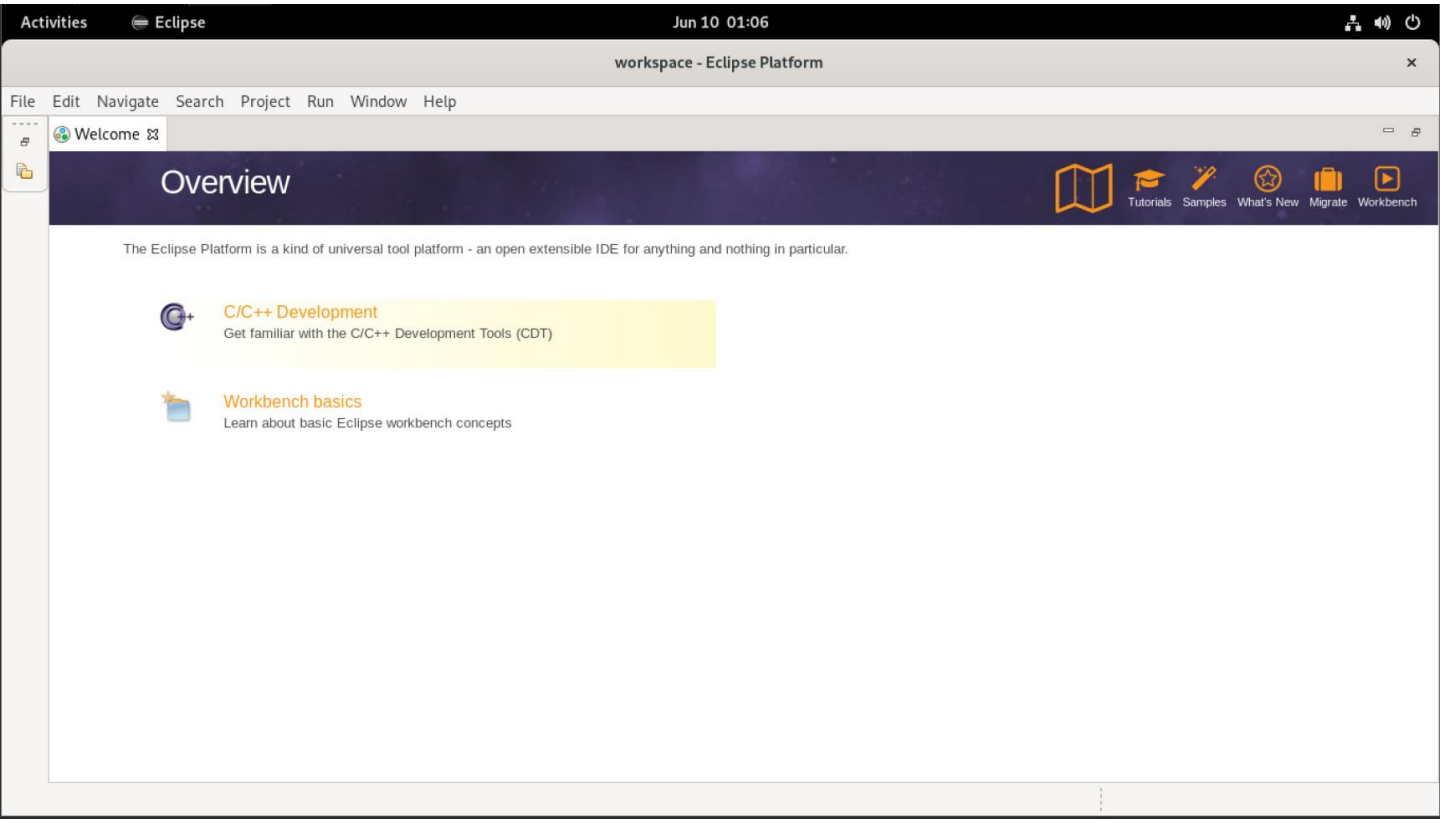


In the “Name” field, expand “Programming Language” and check the option “C/C++ Development Tools”.

The screen display a successfully installation message and then I re-launch Eclipse.

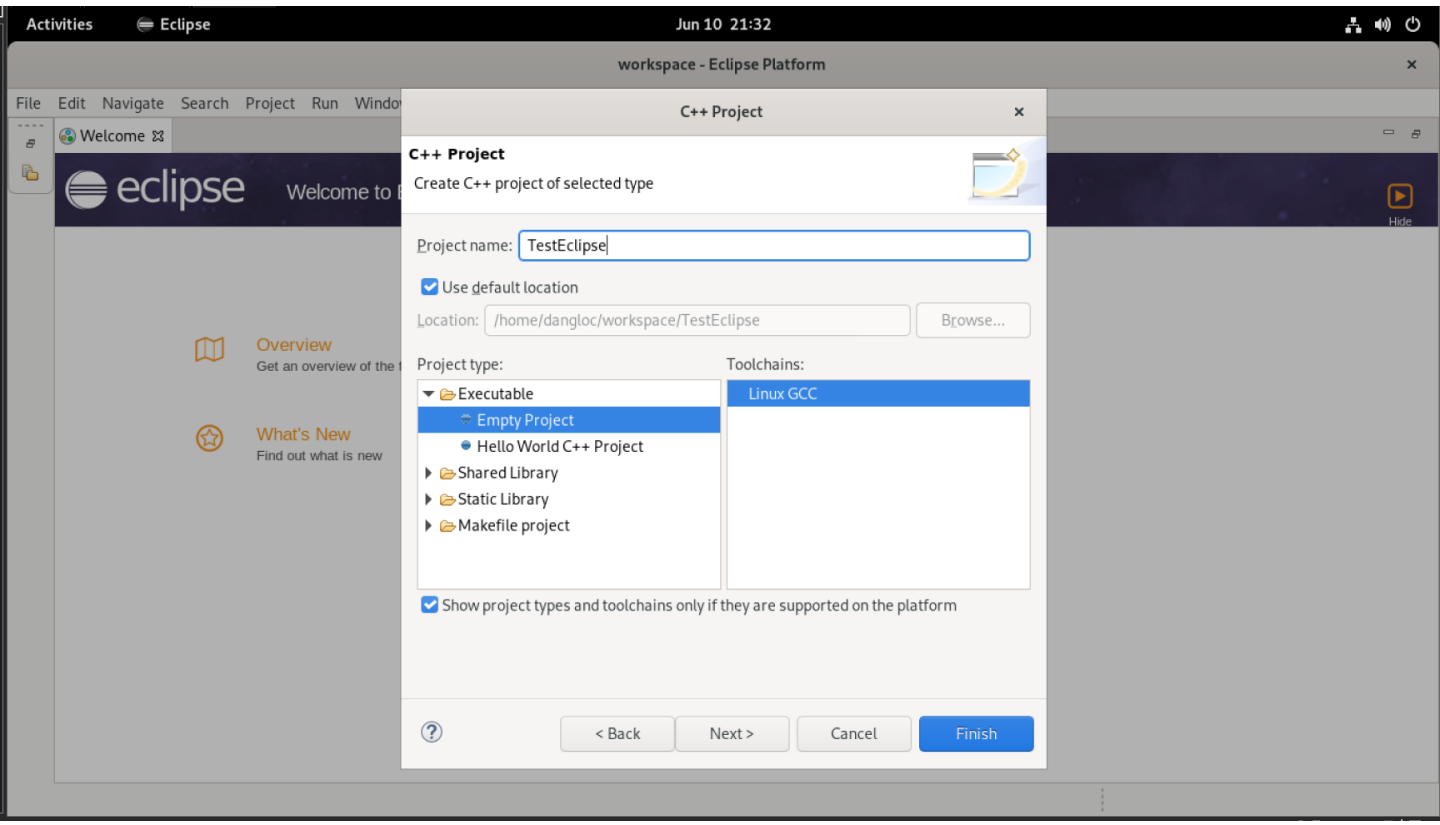


Eclipse interface after installing CDT.

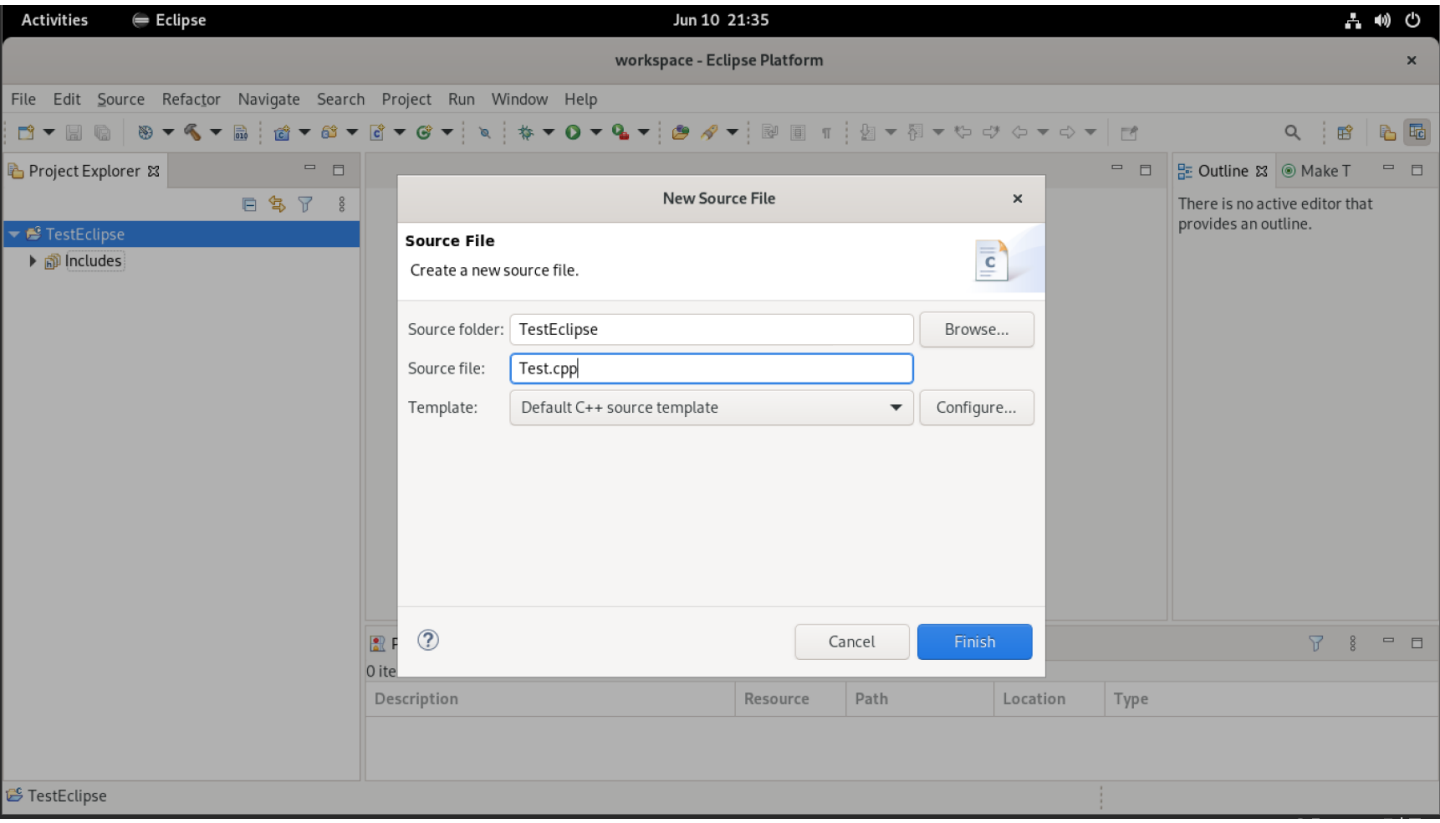


The next step is configuring Eclipse IDE. MinGW binaries are included in the PATH environment variable. CDT searches the PATH to discover the C/C++ compilers.

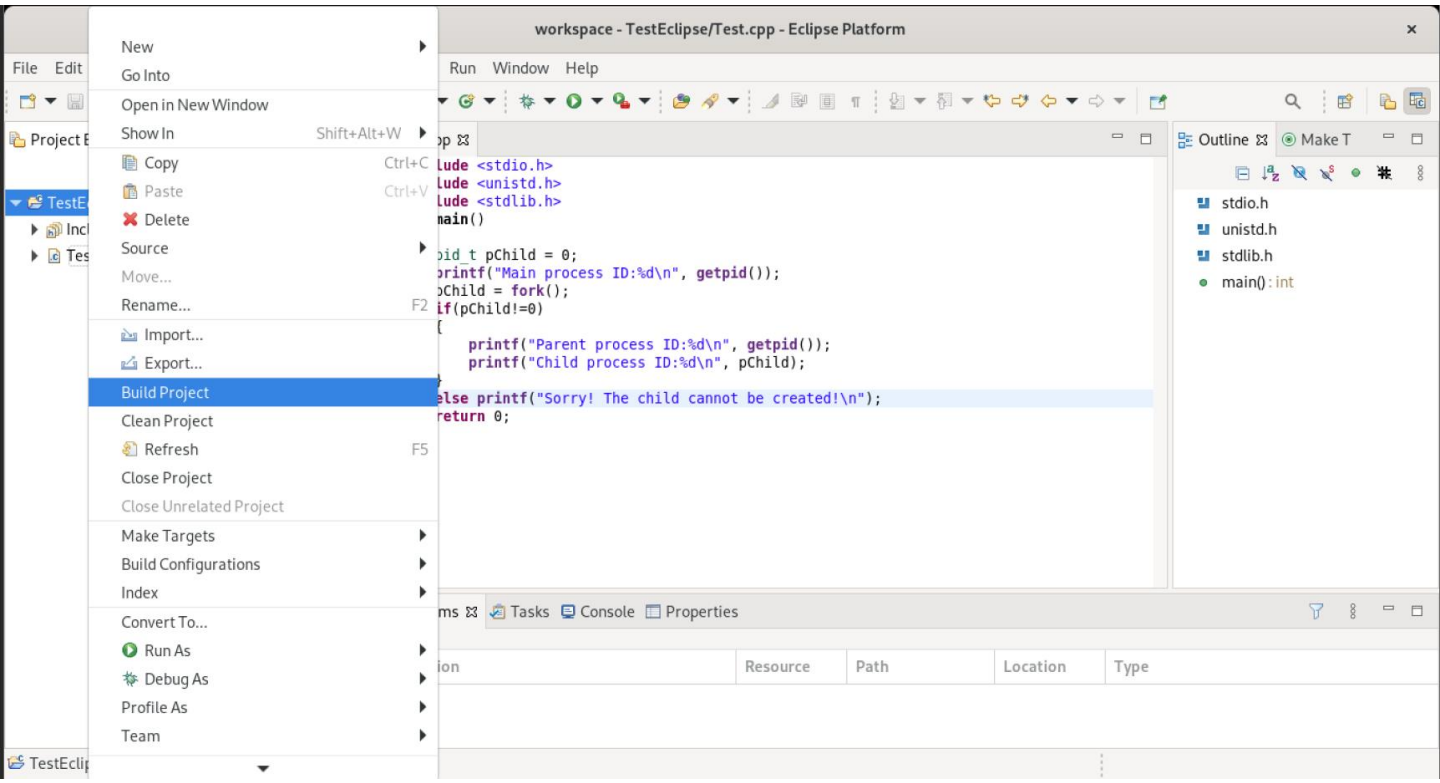
Specify the name of the project. Then I select an **Empty project** and the compilers on the system are listed under "**ToolChains**". I select the **Linux GCC compiler** and then click Next.

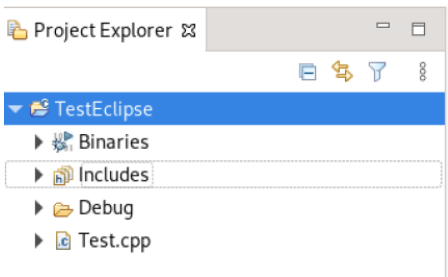


The new C++ project was created and I create a new source file named "Test.cpp"



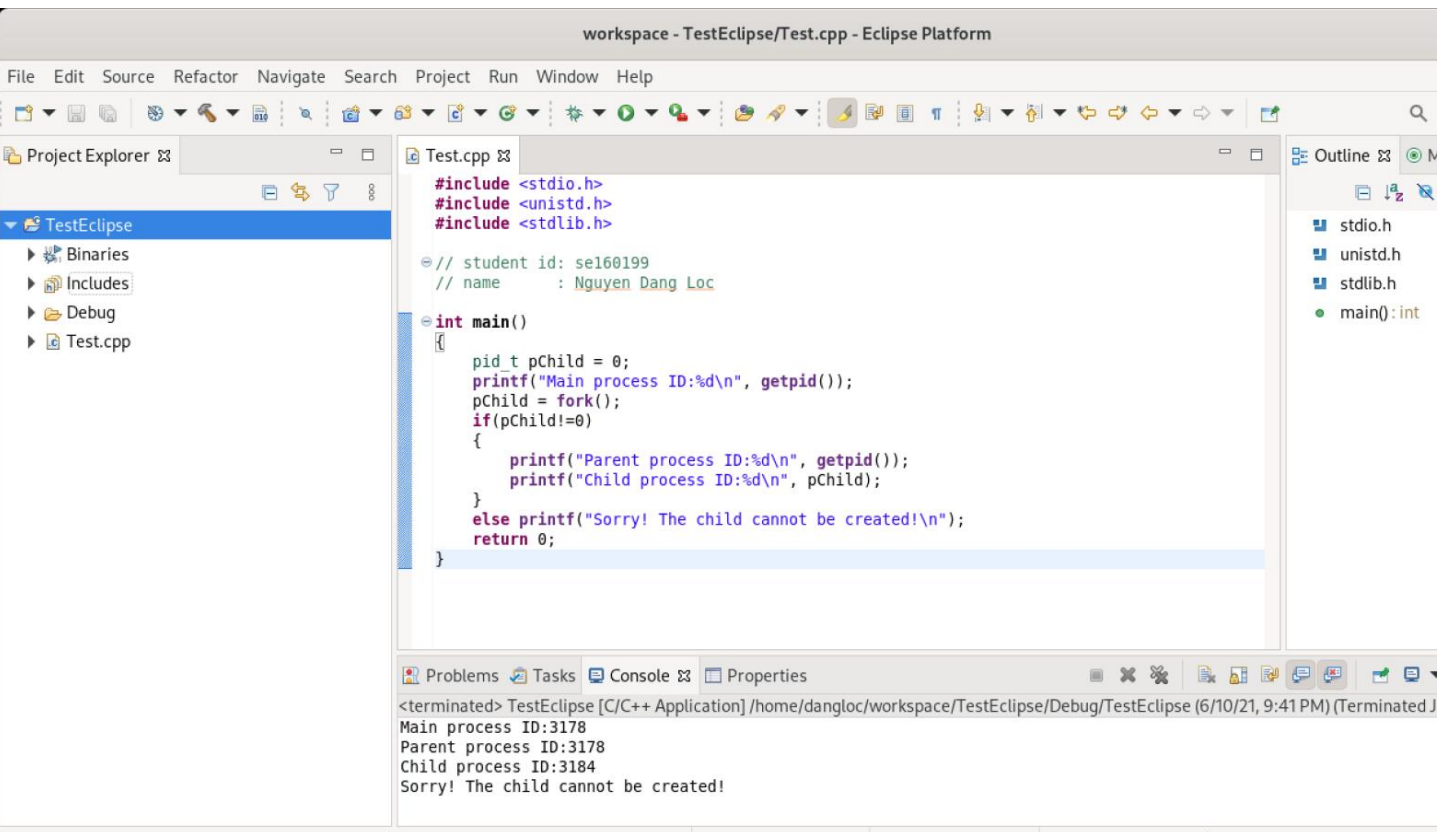
Click on Build Project to start compile and prepare for executing the project.



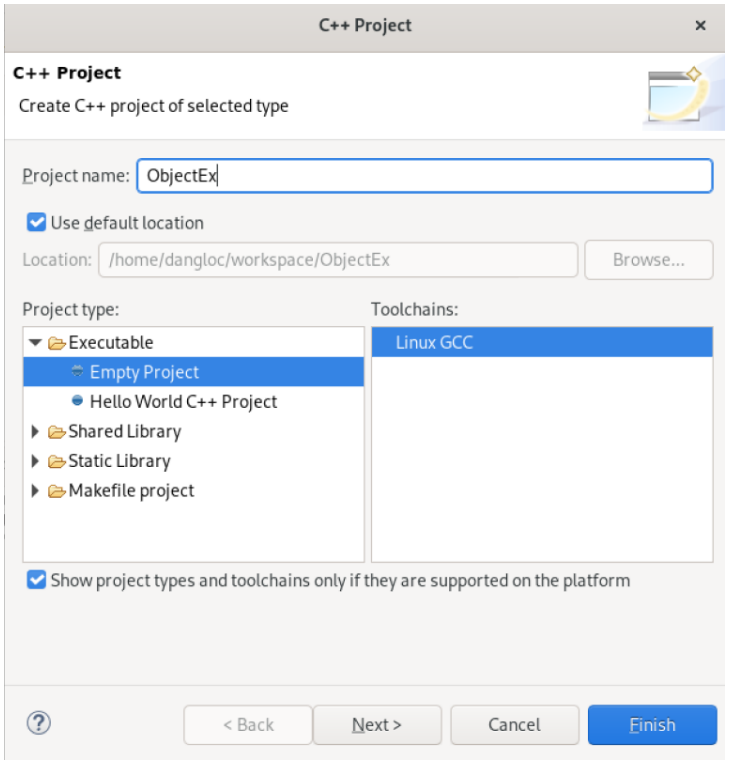


The project successfully and a binaries file was made, it's necessary to run the program.

The program run successfully and the output as shown in the Console window.



3.2. Create a object-oriented Project in Eclipse IDE

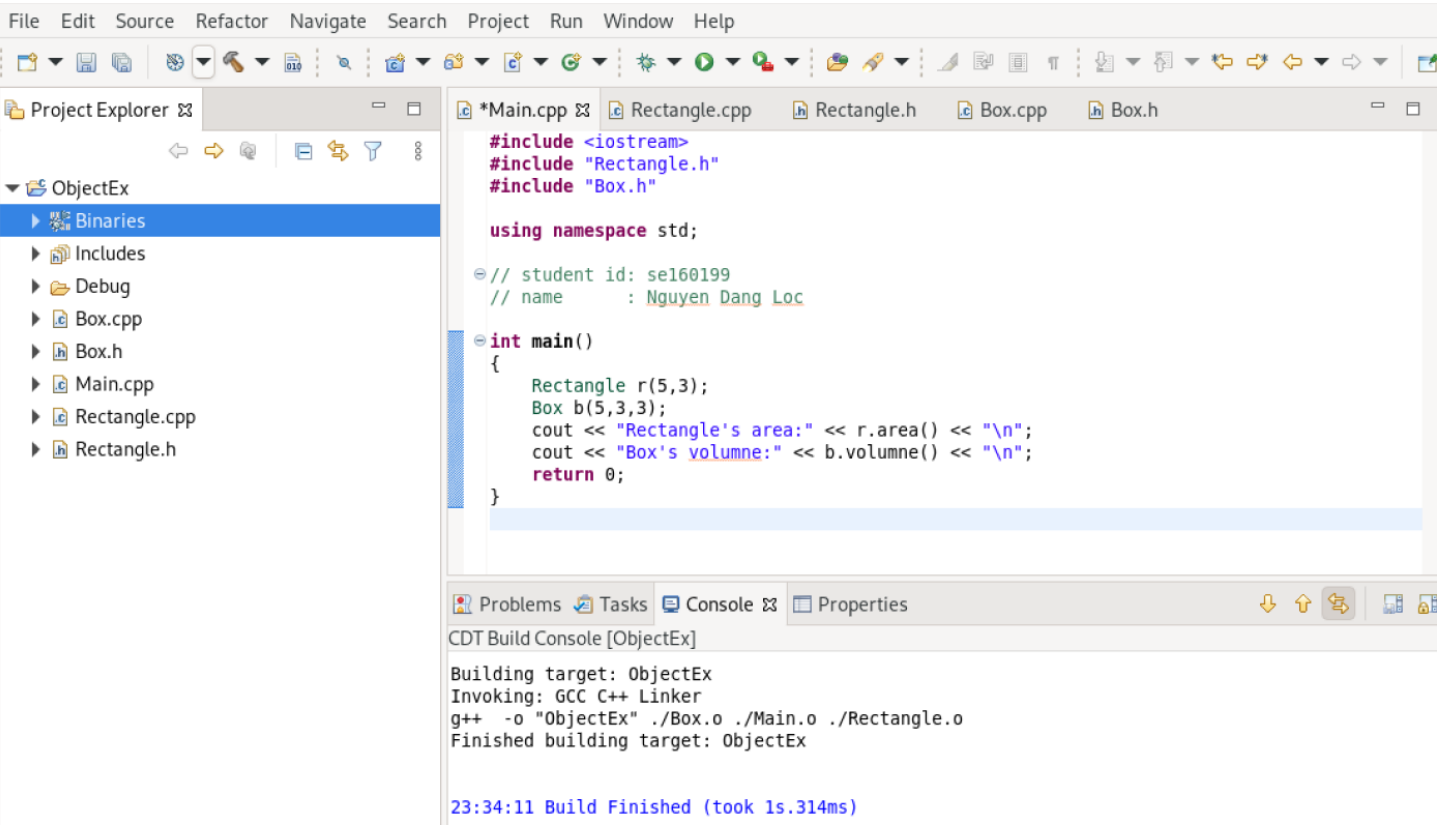


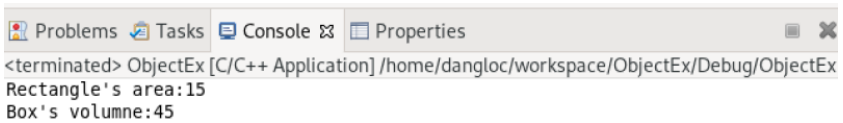
I created a new C++ object-oriented project and named it **"ObjectEx".**

All the following steps are the same to the earlier part (previous slide).

After a mean time of coding, the Main class with 2 classes Rectangle and Box were created.

I build the whole project and a successful message displayed, there were no error arise.





Execute it and the results are as displayed.

Thank you!

By Nguyen Dang Loc