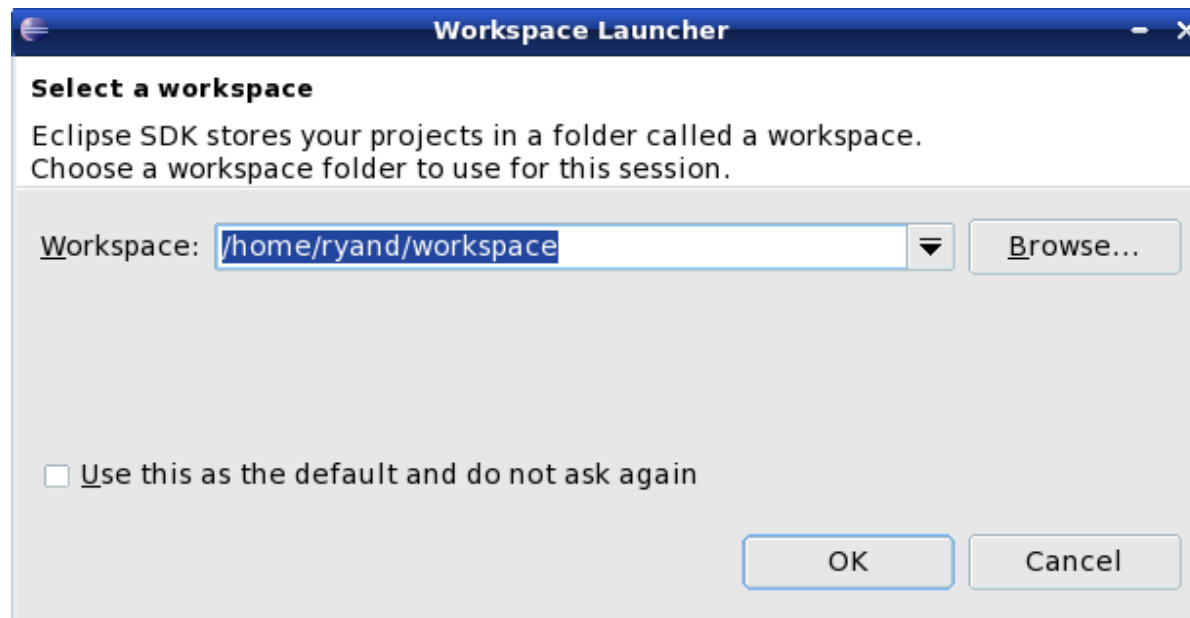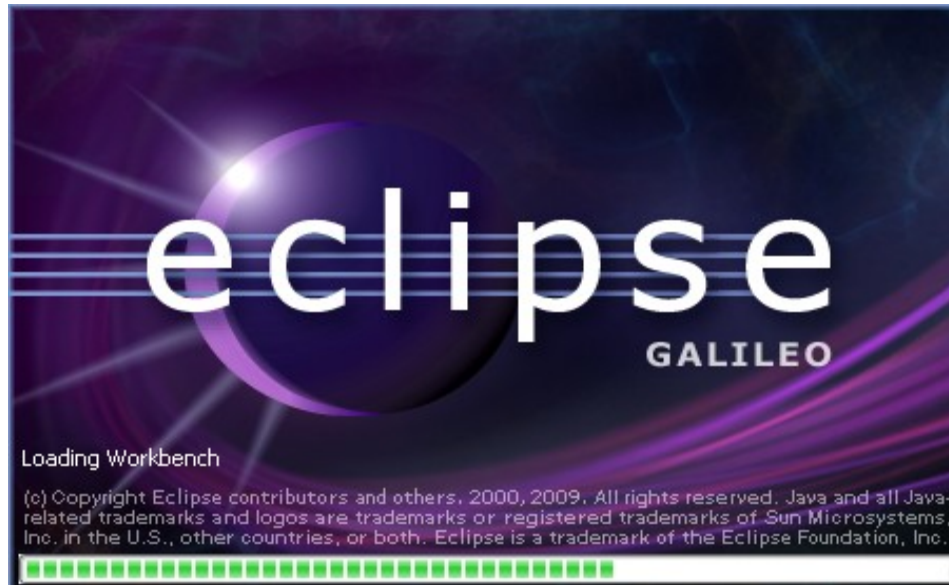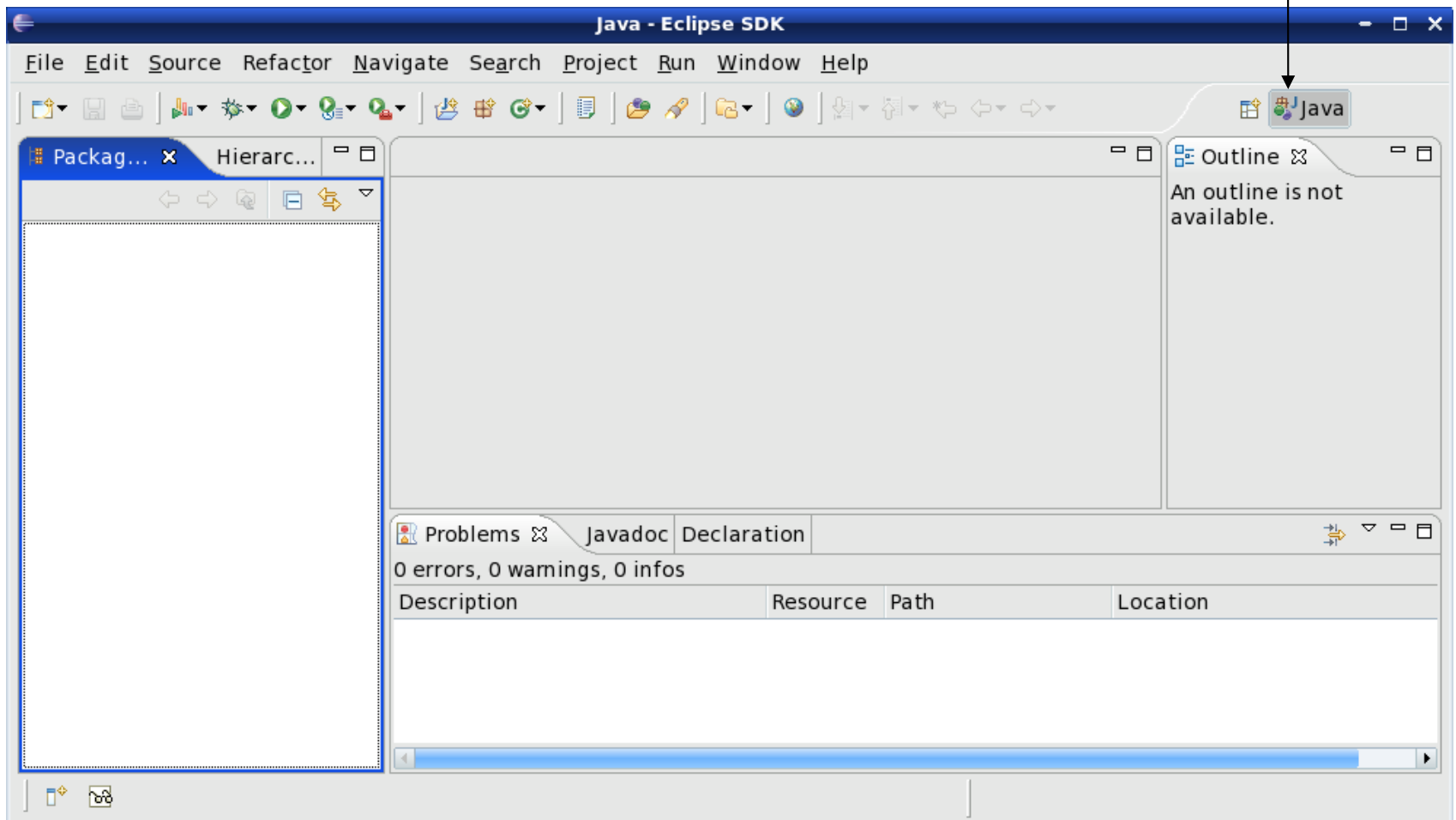# What is Eclipse?

- Eclipse
  - Integrated Development Environment (IDE) that contains an editor, compiler, and debugger among other things
  - Requires a Java Runtime Environment
  - Can develop C, C++, and Java programs
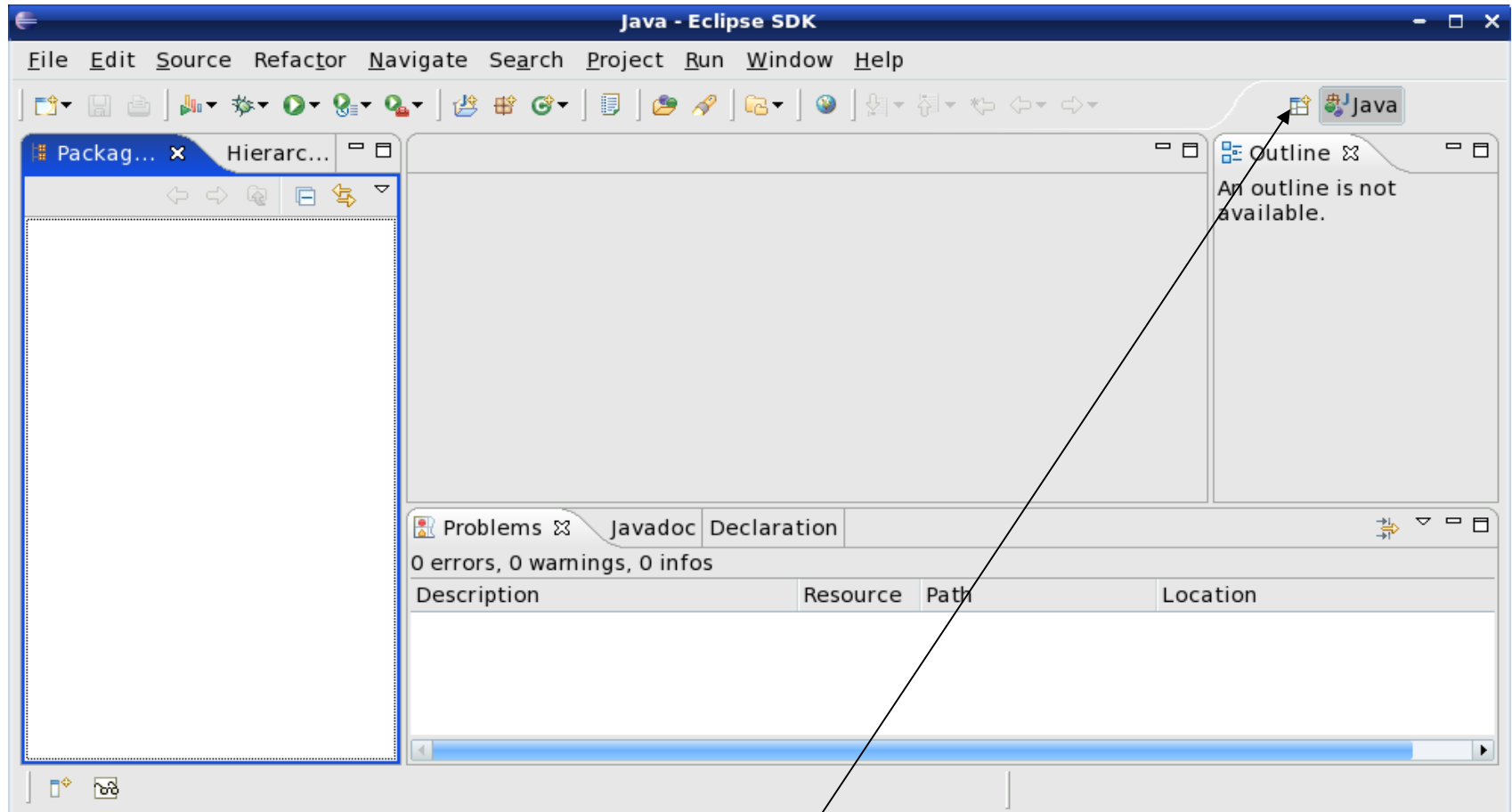
Workspace Launcher

Select the perspective for coding

Make sure the perspective is C/C++ not Java

Changing your perspective for coding

Change the perspective to C/C++ by clicking the icon above.
Then select Other and finally C/C++
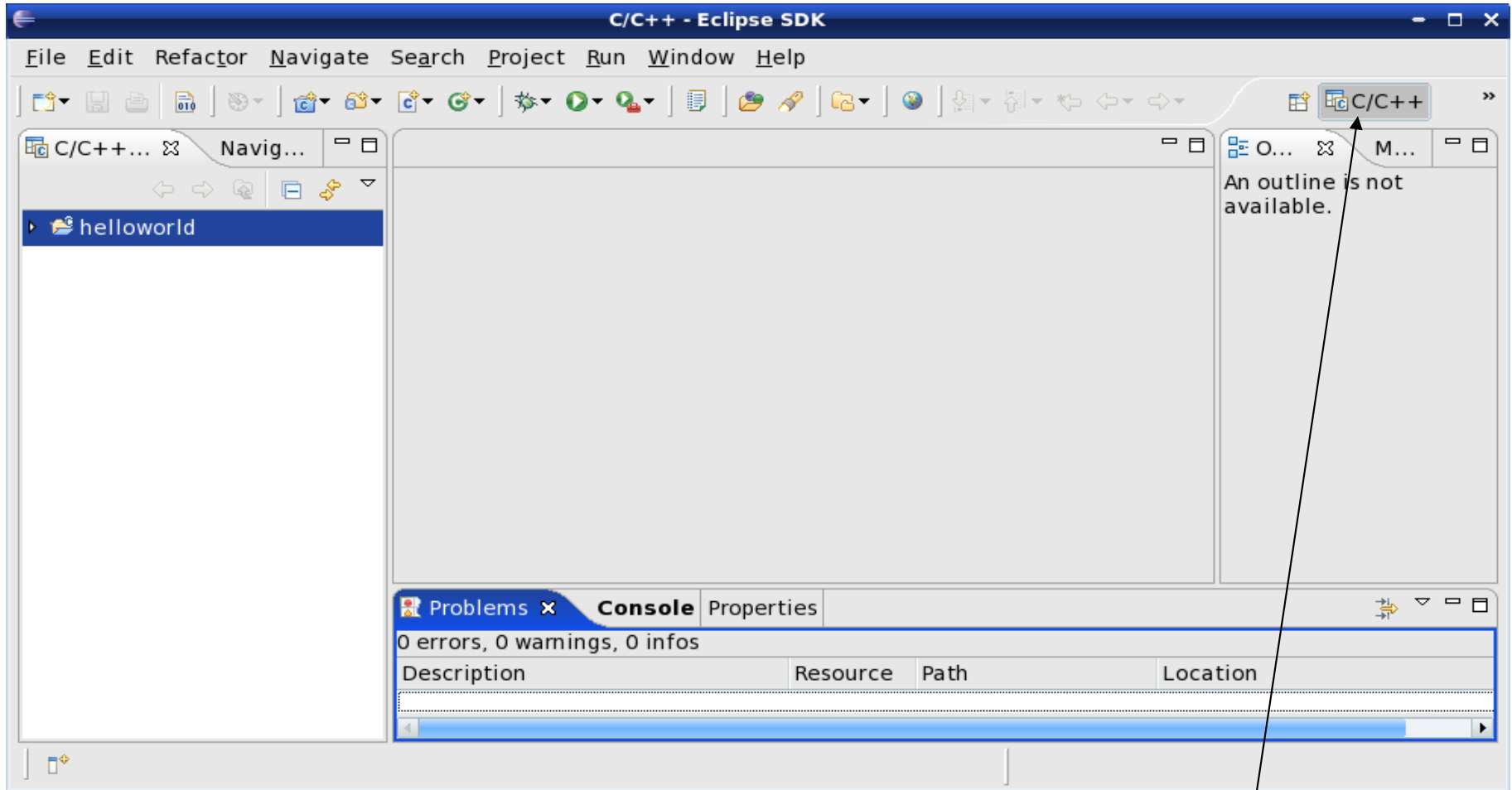
Create a new **HelloWorld** project

File → New → C Project

Make sure that the type of project that you create is an "Executable" and "Empty Project"

Makefile Project → Empty Project → Linux GCC
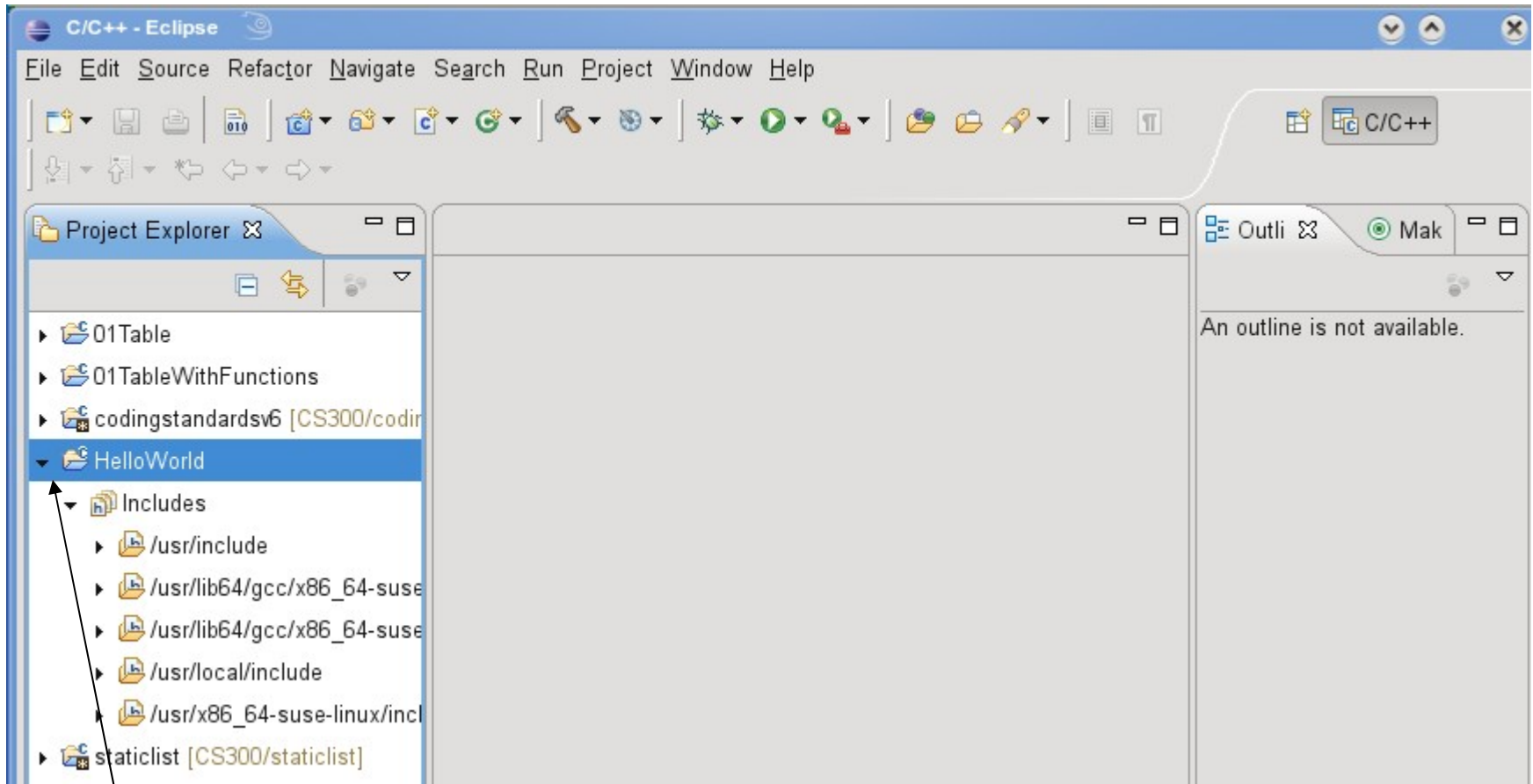   Then click Next

Advanced Settings → C/C++ Build → Uncheck "Generate Makefiles Automatically" → OK
    Then Finish

A HelloWorld project

Make sure your perspective is C/C++

What's in a new HelloWorld project?

Expand helloworld and see that no source file exists
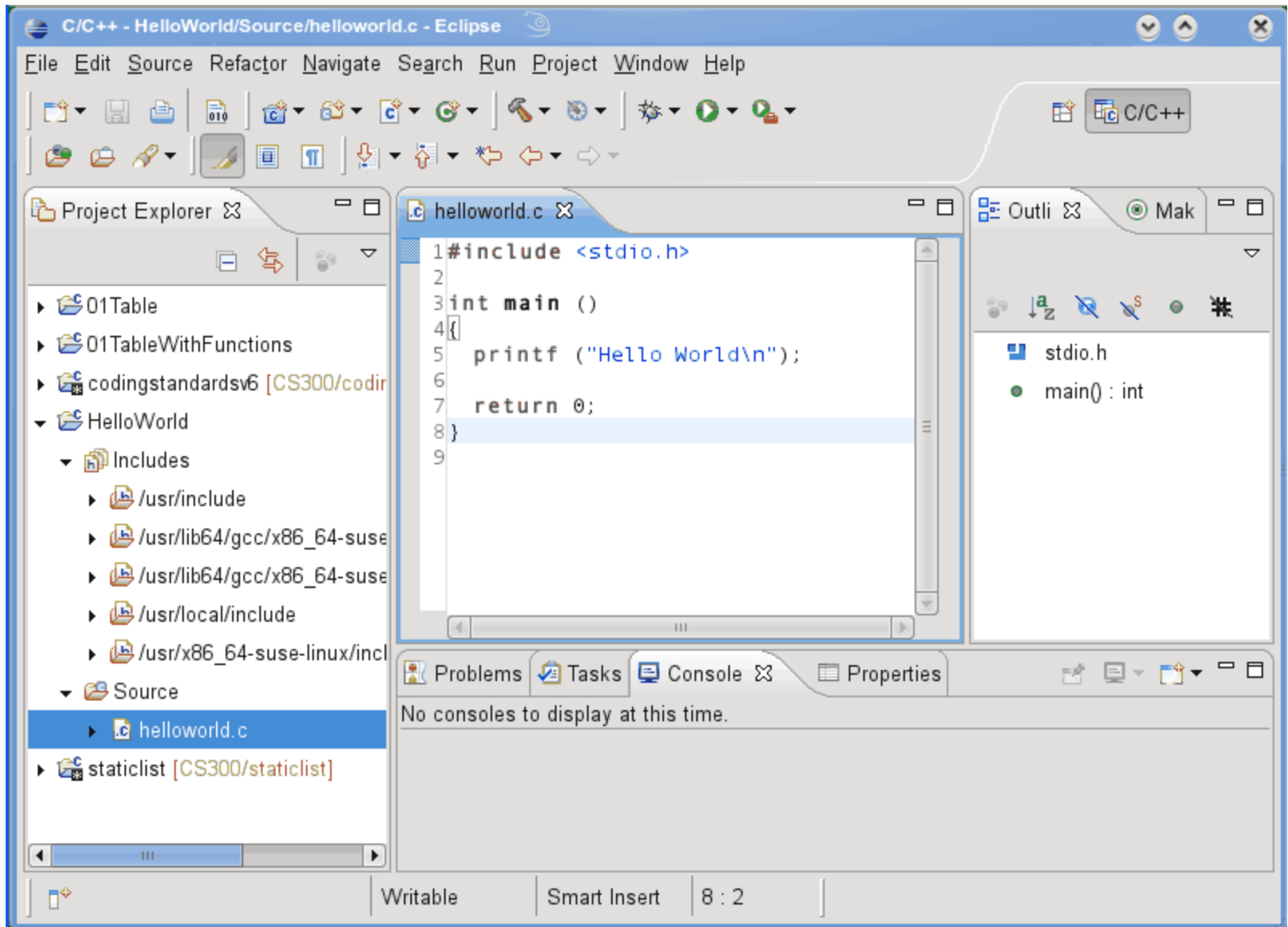
Create helloworld.c?

In HelloWorld project, create a folder called **Source**
Then create **helloworld.c** in the source folder

```
#include <stdio.h>

int main ()
{
    printf ("Hello World\n");

    return 0;
}
```

Result?

Create a Makefile

You need to create a file called Makefile in the helloworld folder. A Makefile specifies rules of how the executable is to be created.

File → New → Source File

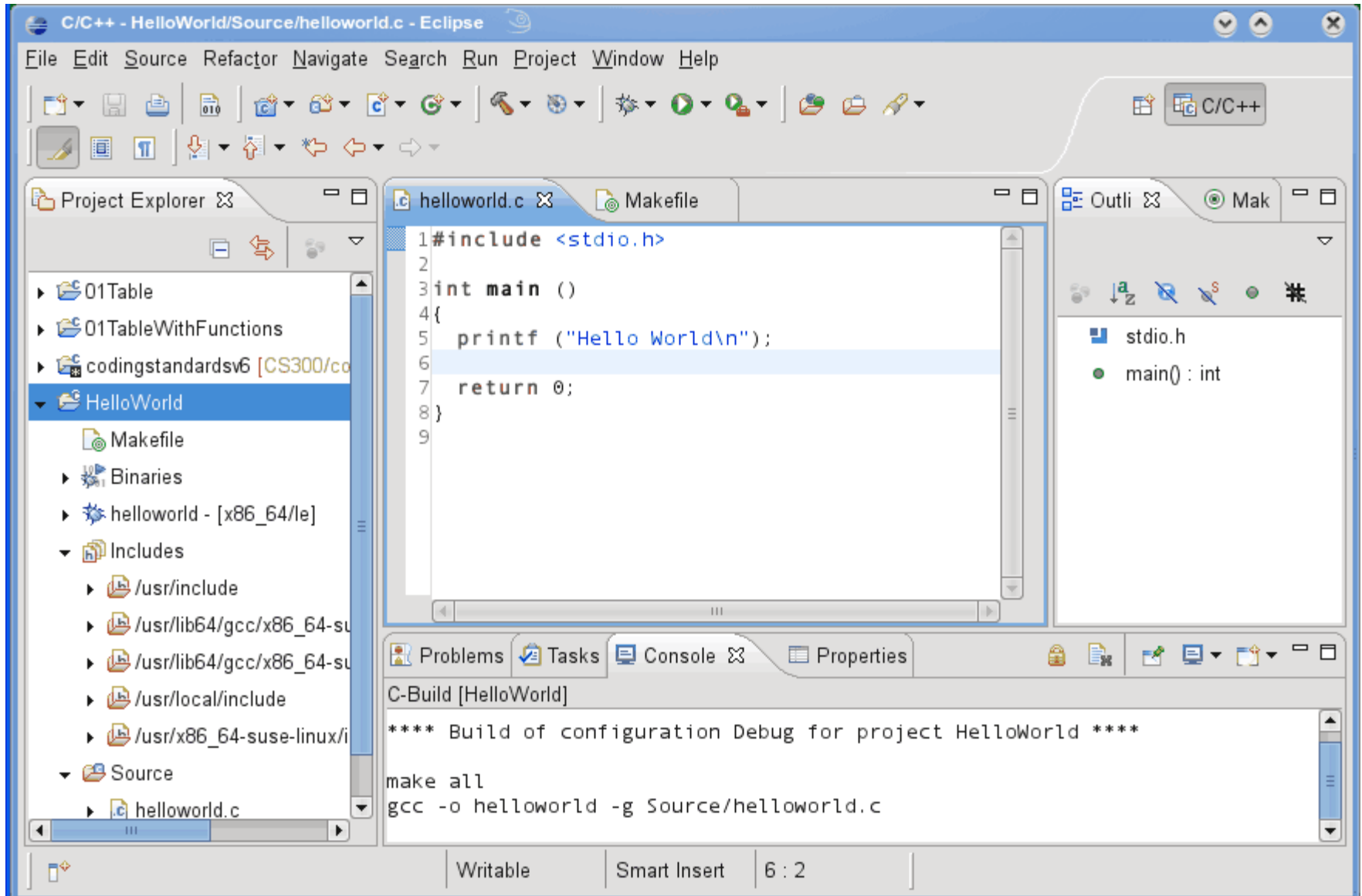Call the makefile either **Makefile** or **makefile**

The makefile text must be (a single tab character precedes gcc):

```
all: helloworld

helloworld: Source/helloworld.c
    gcc -o helloworld -g Source/helloworld.c
```
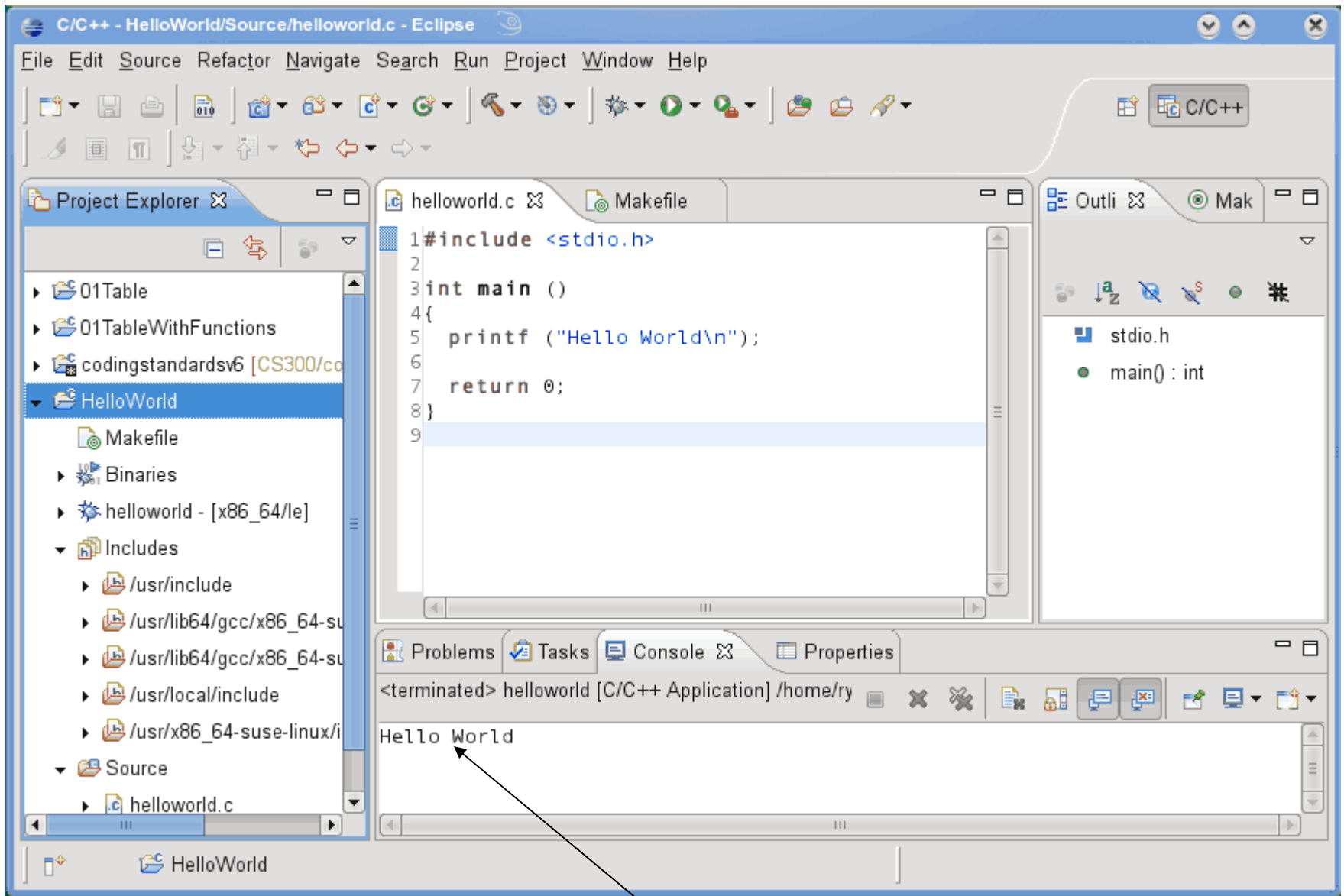
How to build your project ?

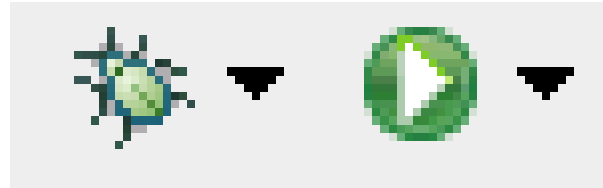Click on helloworld, then Project → Build Project

How to run your program?

Then right click on helloworld and Run As → Local C/C++ Application

If all goes well you will see Hello World in the Console
window

Run versus Debug

Debug   Run

Printing

- Windows | Preferences

- General | Appearance | Colors and Fonts

- C/C++ | Editor | C/C++ Editor Text Font
  - Use Courier 10 Pitch, Size 8

- This changes the font on the screen!
  - You may want to change back after printing

- Print doubled sided!