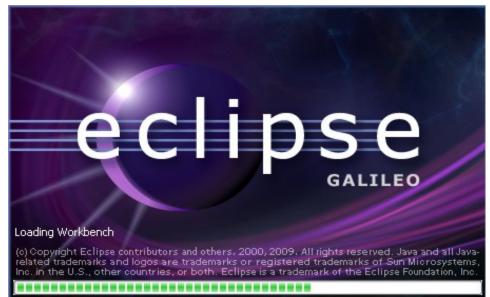
# What is Eclipse?

- 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



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Select a workspace		
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# Select the perspective for coding

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

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# Changing your perspective for coding

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Change the perspective to C/C++ by clicking the icon above. Then select Other and finally C/C++

#### Create a new HelloWorld project

 $\mathsf{File} \to \mathsf{New} \to \mathsf{C} \mathsf{Project}$ 

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

Makefile Project  $\rightarrow$  Empty Project  $\rightarrow$  Linux GCC Then click Next

Advanced Settings  $\rightarrow$  C/C++ Build  $\rightarrow$  Uncheck "Generate Makefiles Automatically"  $\rightarrow$  OK Then Finish

# A HelloWorld project

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Make sure your perspective is C/C++

# What's in a new HelloWorld project?

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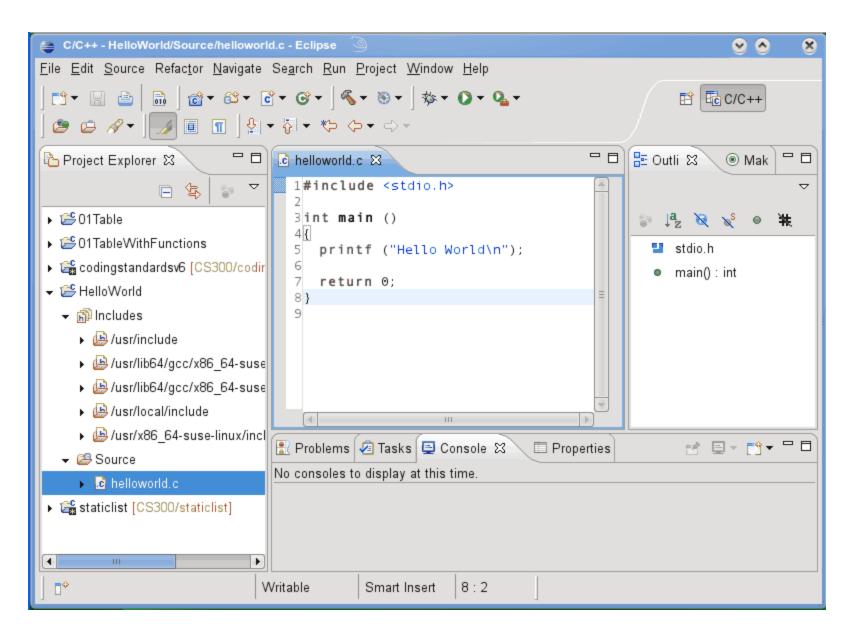
Expand helloworld and see that no source file exists

# 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.

 $\mathsf{File} \to \mathsf{New} \to \mathsf{Source} \mathsf{File}$ 

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

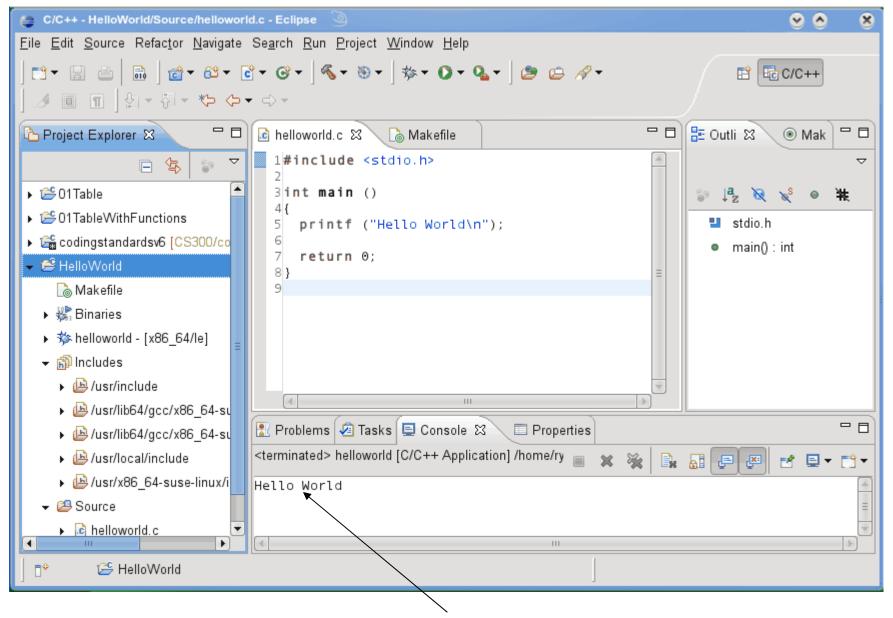
#### How to build your project?

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	make all gcc -o helloworld -g Source/helloworld.c	≡
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Click on helloworld, then Project  $\rightarrow$  Build Project

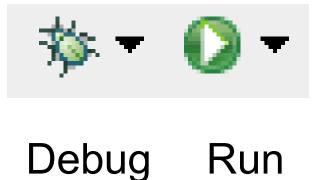
# How to run your program?

Then right click on helloworld and Run As  $\rightarrow$  Local C/C++ Application



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

#### Run versus Debug



# 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!