# How to Install Erika Enterprise (Windows)

**Avees Lab**

# Cygwin 설치

[http://Cygwin.com](http://Cygwin.com) 접속 후 운영체제에 맞는 Cygwin 다운로드



운영체제에 맞는
Cygwin 다운로드 !

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# Cygwin 설치

설치시 make 추가 **Devel Category**
설치 후 사용자 변수 추가 (제어판 -> 시스템 -> 고급시스템설정 -> 환경변수
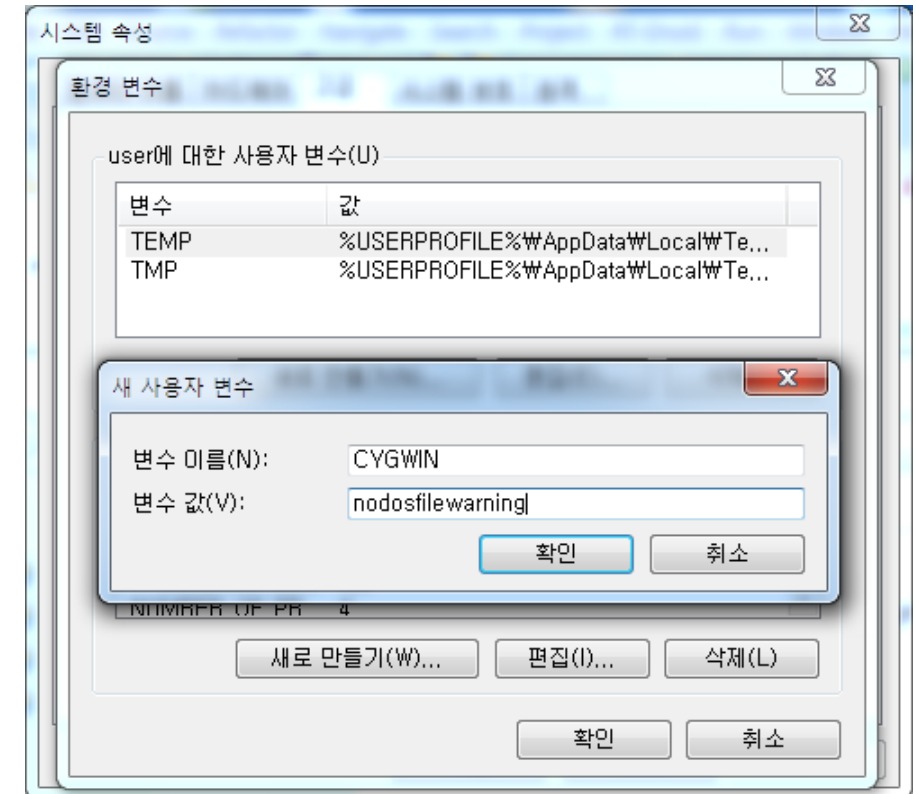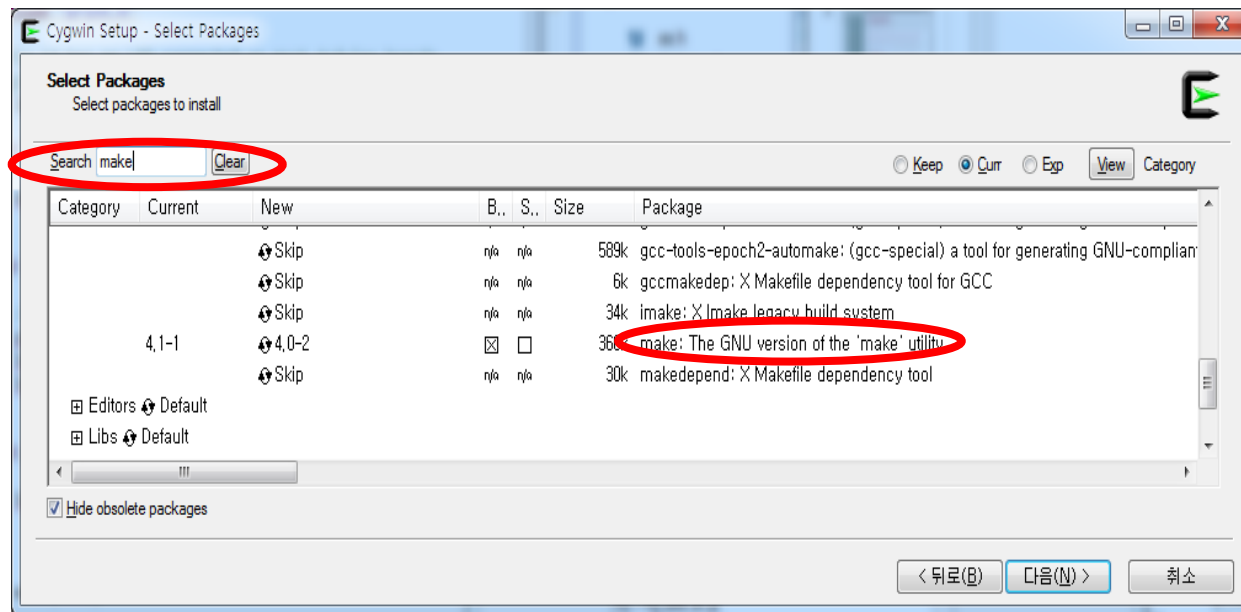
# Arduino IDE 설치

설치시 경로를 C:\arduino-1.6.0 로 지정
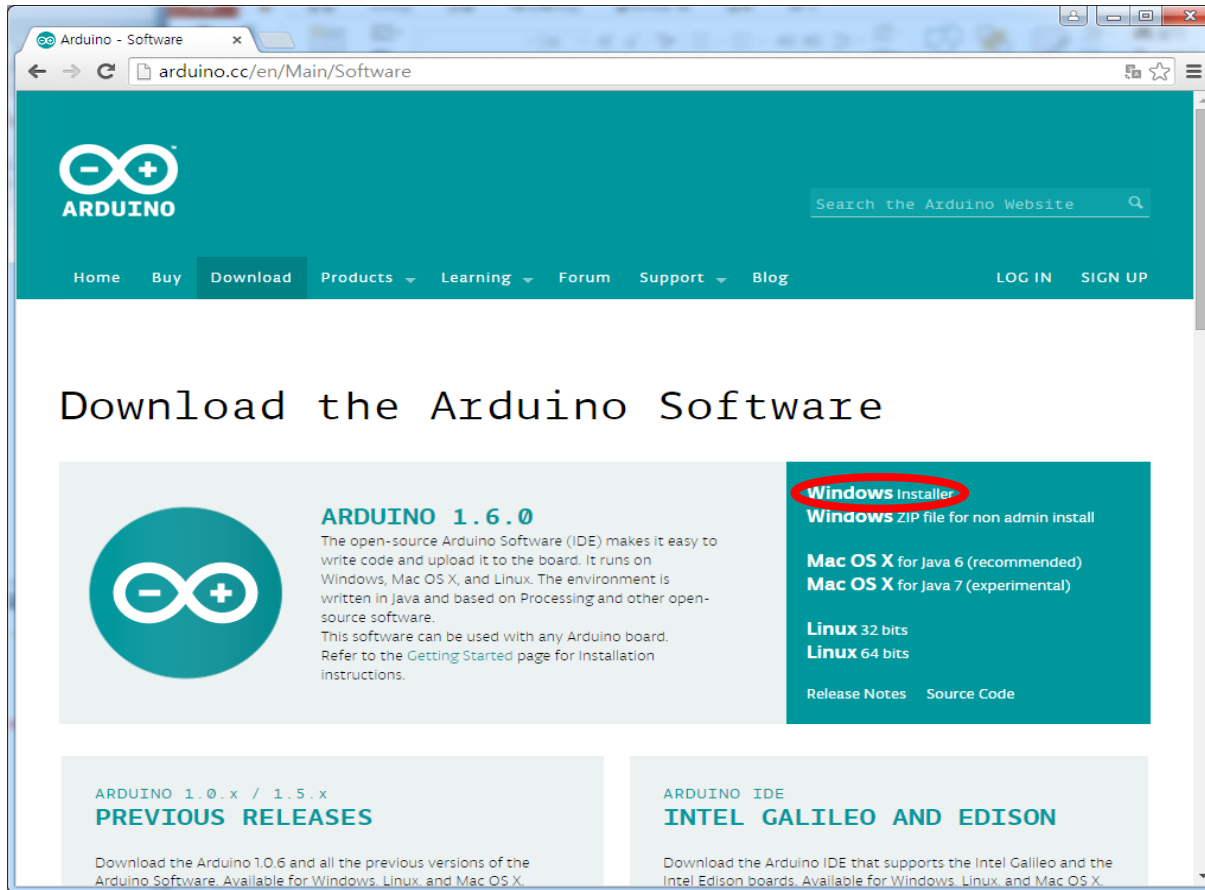
# Erika Enterprise IDE 설치 (압축만 풀면 됨)

운영체제에 맞는 RT-Druid 압축파일 복사 후 압축 풀기
압축을 푼 다음 폴더를 C:\로 복사
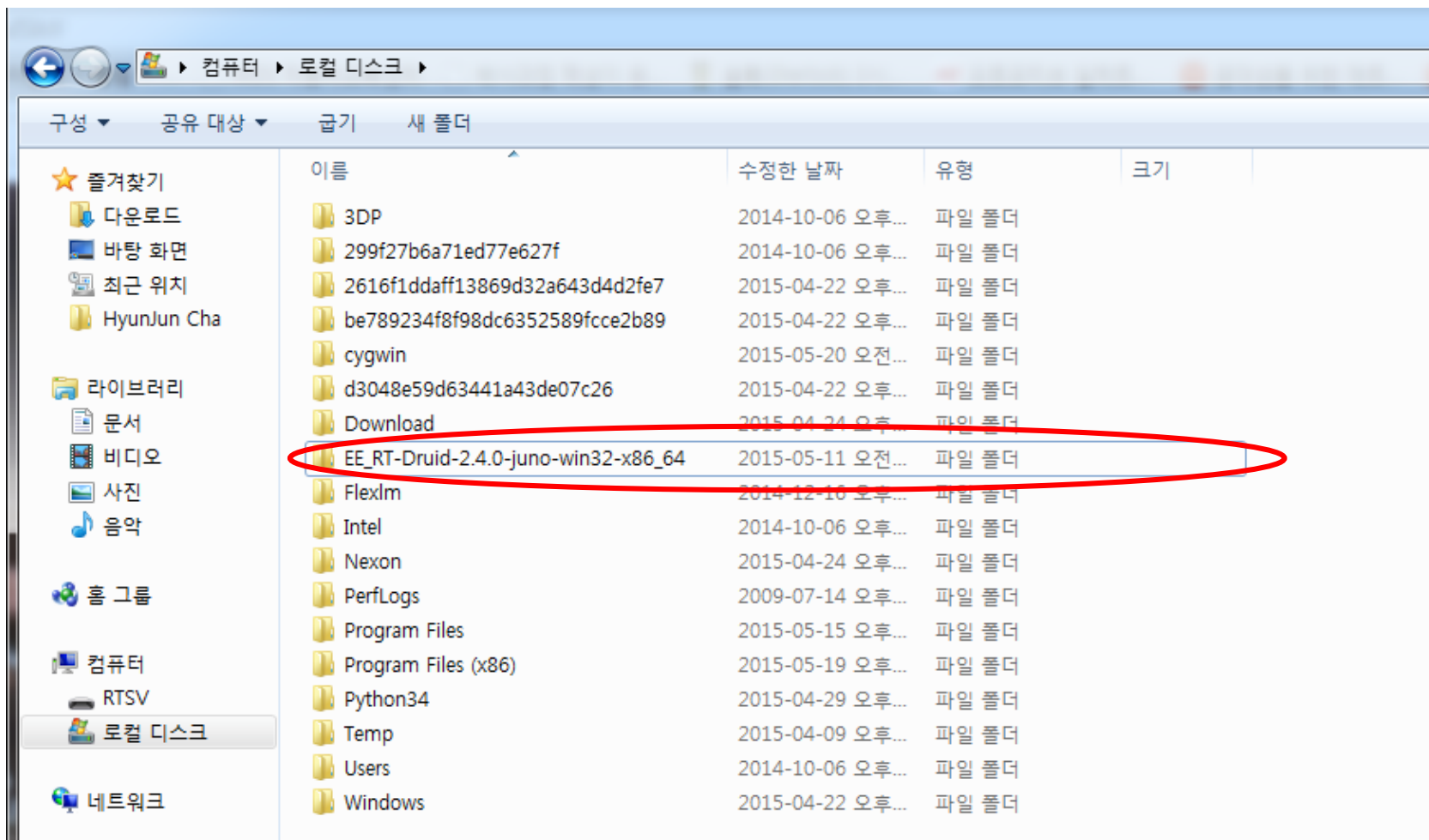
# Erika Enterprise IDE 설치

다음과 같이 수정

```
##
## Author:  2014,  Giuseppe Serano
##

##Check if is the stack that we're asking for
ifeq ($(call iseeopt, __ARDUINO_SDK__), yes)

## Check the Arduino library selection
ifeq ($(findstring __LIB_ARDUINO_SDK__,$(LIB_OPT)) , __LIB_ARDUINO_SDK__)
INCLUDE_ARDUINO_SDK = YES
endif

## Check if it's selected all libs inclusion
ifeq ($(call iseeopt, __BUILD_ALL_LIBS__), yes)
INCLUDE_ARDUINO_SDK = YES
endif

##
## If the library is required
##
ifeq ($(INCLUDE_ARDUINO_SDK), YES)

ifndef  ARDUINO_SDK_FILES
export  ARDUINO_SDK_FILES = C:/arduino-1.6.0
endif

ifeq ($(call iseeopt, __RTD_LINUX__), yes)
ARDUINO_SDK_ROOT := \
            $(call short_native_path, $(ARDUINO_SDK_FILES))
else
ARDUINO_SDK_ROOT := \
        $(shell cygpath $(call short_native_path, $(ARDUINO_SDK_FILES)))
endif

EE_VPATH += $(ARDUINO_SDK_ROOT)

EEOPT += ARDUINO=160

##
## Library code
##
## Add the inc path to the include pathlist
## New include mechanism

INCLUDE_PATH := $(ARDUINO_SDK_ROOT)/hardware/arduino/avr/cores/arduino  \
    $(INCLUDE_PATH)

ifeq ($(call iseeopt, __ARDUINO_UNO_328__), yes)
INCLUDE_PATH := $(ARDUINO_SDK_ROOT)/hardware/arduino/avr/variants/standard  \
    $(INCLUDE_PATH)
endif
```

C:\EE_RT-Druid-2.4.0-juno-win32-x86_64\eclipse\plugins\com.eu.evidence.ee_2.4.0.20141105_0021\ee_files\contrib\arduino\cfg 밑에 있는 **libcfg.mk** 파일 수정

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# Erika Enterprise IDE 설치

다음과 같이 수정

최신 버전 Arduino의
바뀐 소스코드 리스트

**Copy&paste용**

```
ifeq    ($(call iseeopt, __ATMEGA__), yes)

ifeq    ($(call iseeopt, __AVR8__), yes)

EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/wiring.c
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/wiring_digital.c
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/wiring_analog.c
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/wiring_pulse.c
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/wiring_shift.c
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/CDC.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/HardwareSerial.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/HID.c
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/IPAddress.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/new.c
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/Print.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/Stream.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/Tone.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/USBCore.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/WMath.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/WString.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/hooks.c
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/WInterrupts.c
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/abi.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/HardwareSerial0.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/HardwareSerial1.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/HardwareSerial2.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/HardwareSerial3.cpp
```

```
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/wiring.c
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/wiring_digital.c
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/wiring_analog.c
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/wiring_pulse.c
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/wiring_shift.c
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/CDC.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/HardwareSerial.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/HID.c
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/IPAddress.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/new.c
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/Print.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/Stream.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/Tone.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/USBCore.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/WMath.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/WString.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/hooks.c
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/WInterrupts.c
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/abi.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/HardwareSerial0.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/HardwareSerial1.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/HardwareSerial2.cpp
EE_SRCS_ARDUINO_SDK += hardware/arduino/avr/cores/arduino/HardwareSerial3.cpp
```

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# eclipse의 Window -> Preference 수정



**32bit 는 C:\cygwin**
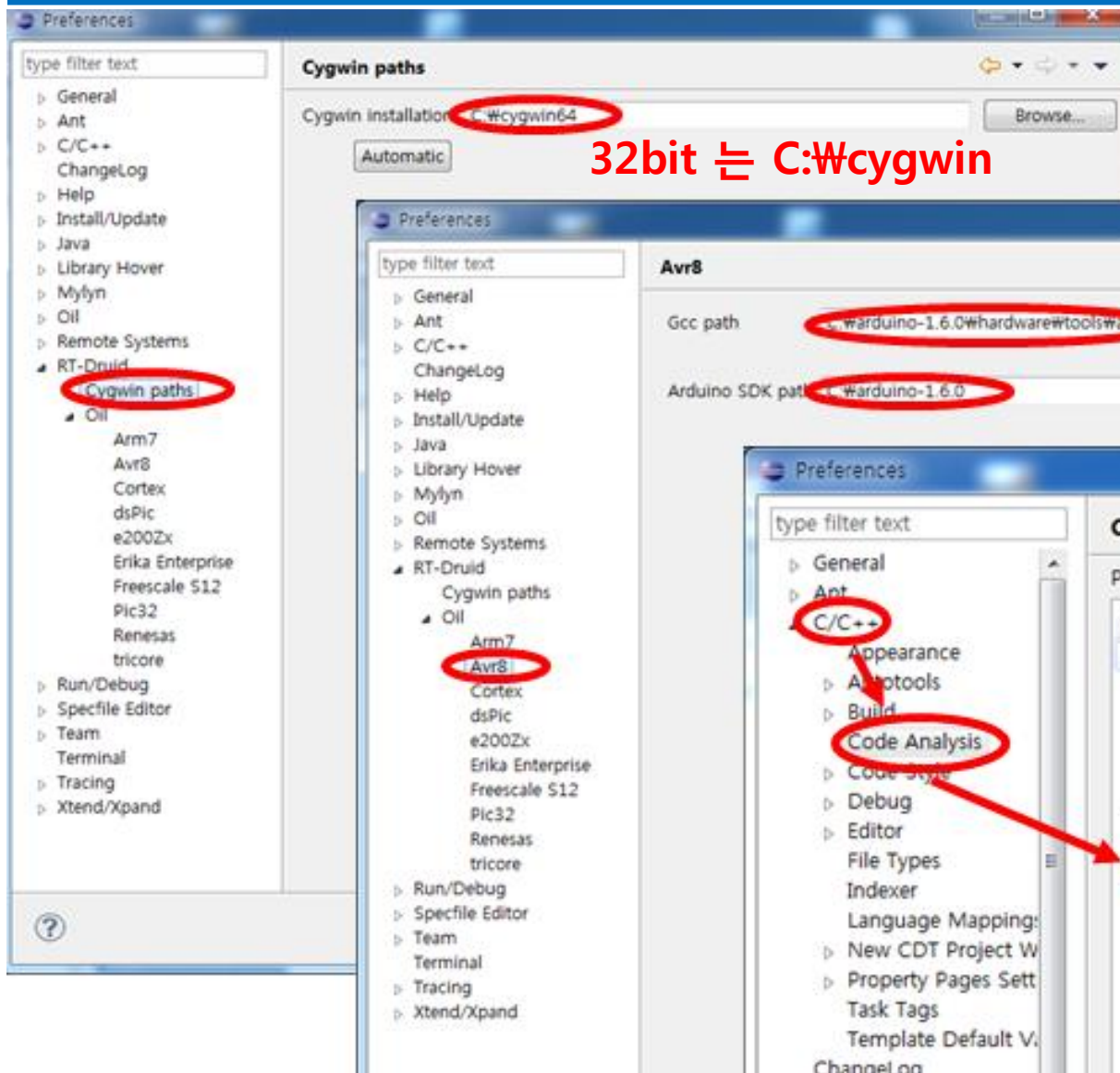
**eclipse 가 실행되지 않을 때에는 압축파일에 들어있는 jre파일 설치**

# Run -> External Tools -> External Tools Configurations 추가 (avrdude)
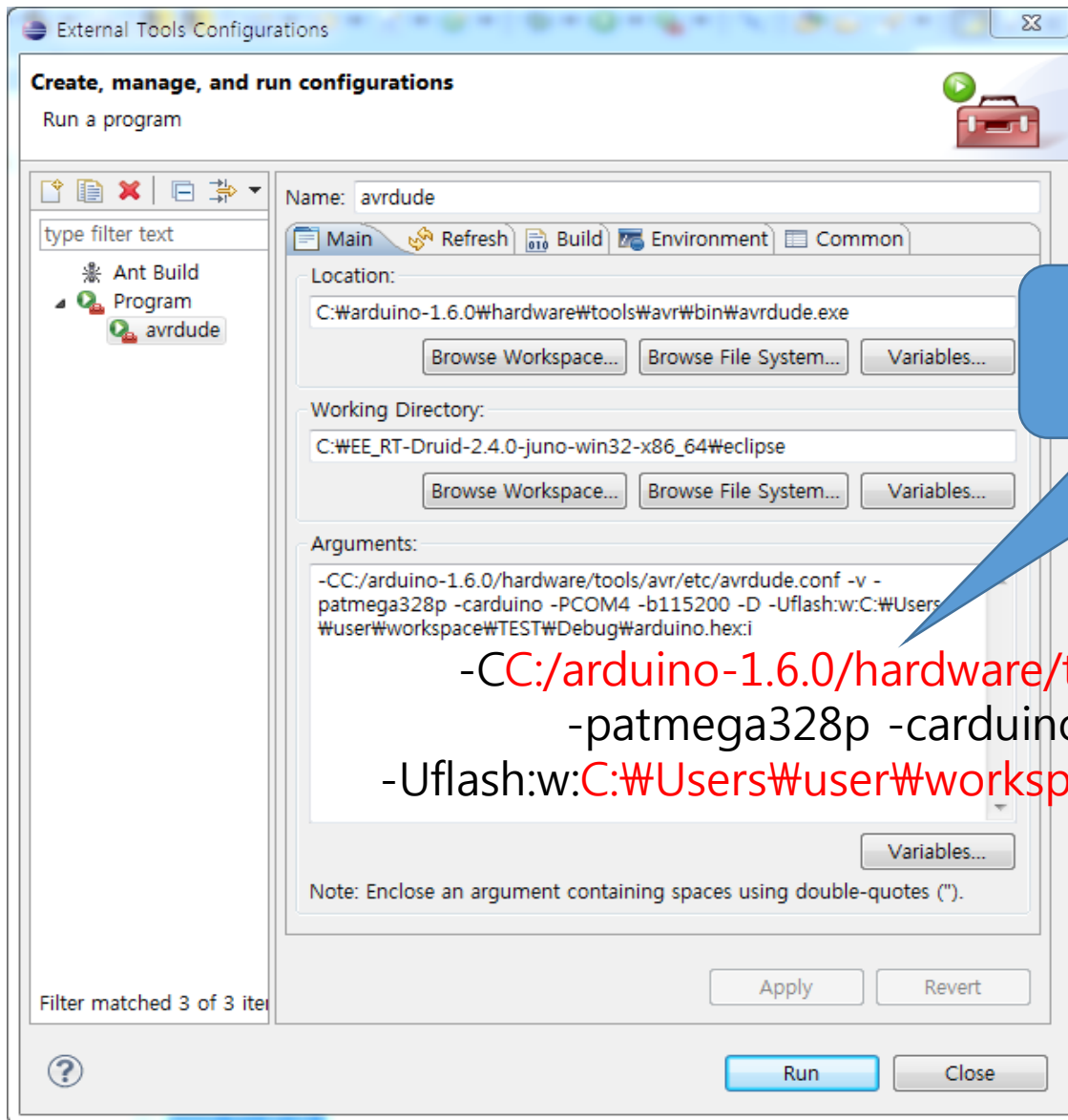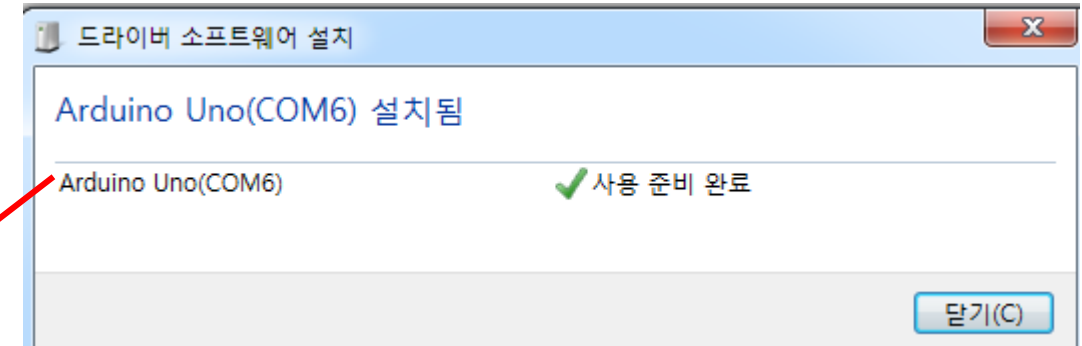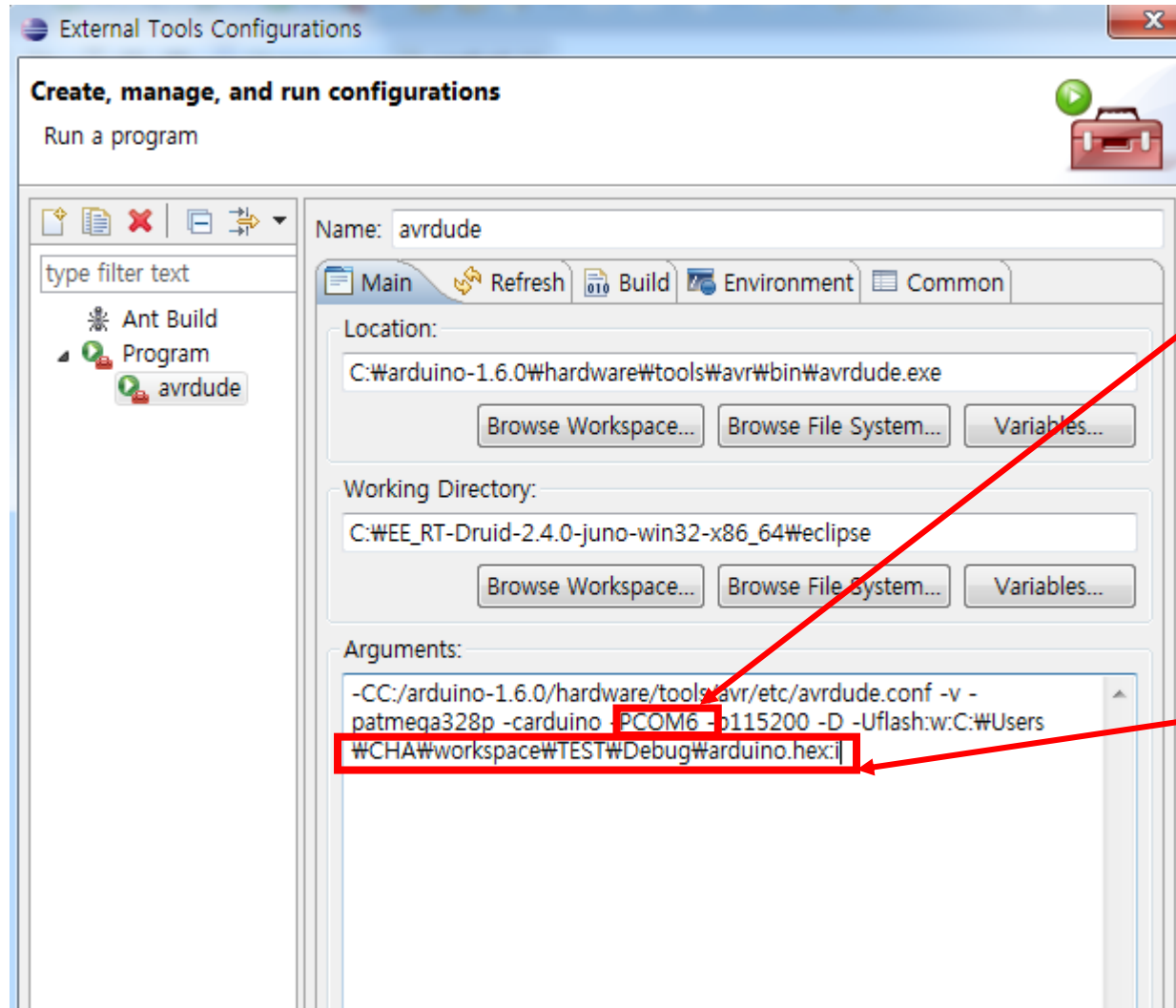


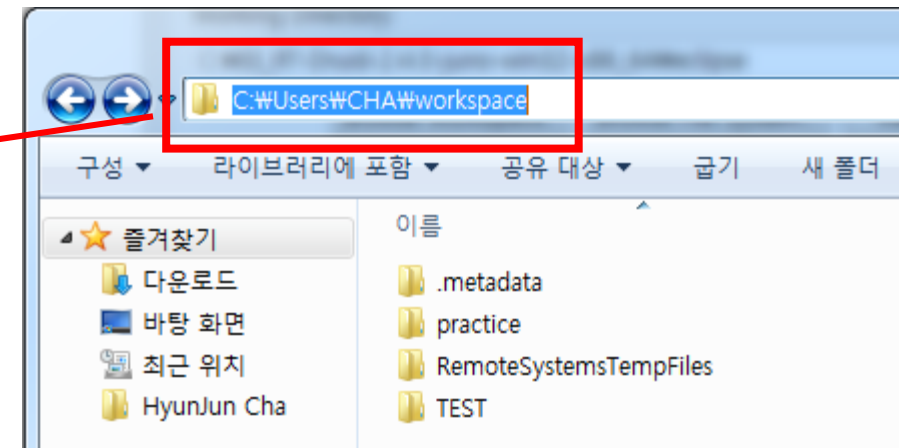-CC:/arduino-1.6.0/hardware/tools/avr/etc/avrdude.conf -v
-patmega328p -carduino -PCOM4 -b115200 -D
-Uflash:w:C:₩Users₩user₩workspace₩TEST₩Debug₩arduino.hex:i

**붉은 글씨부분의 파일 경로를 확인하고
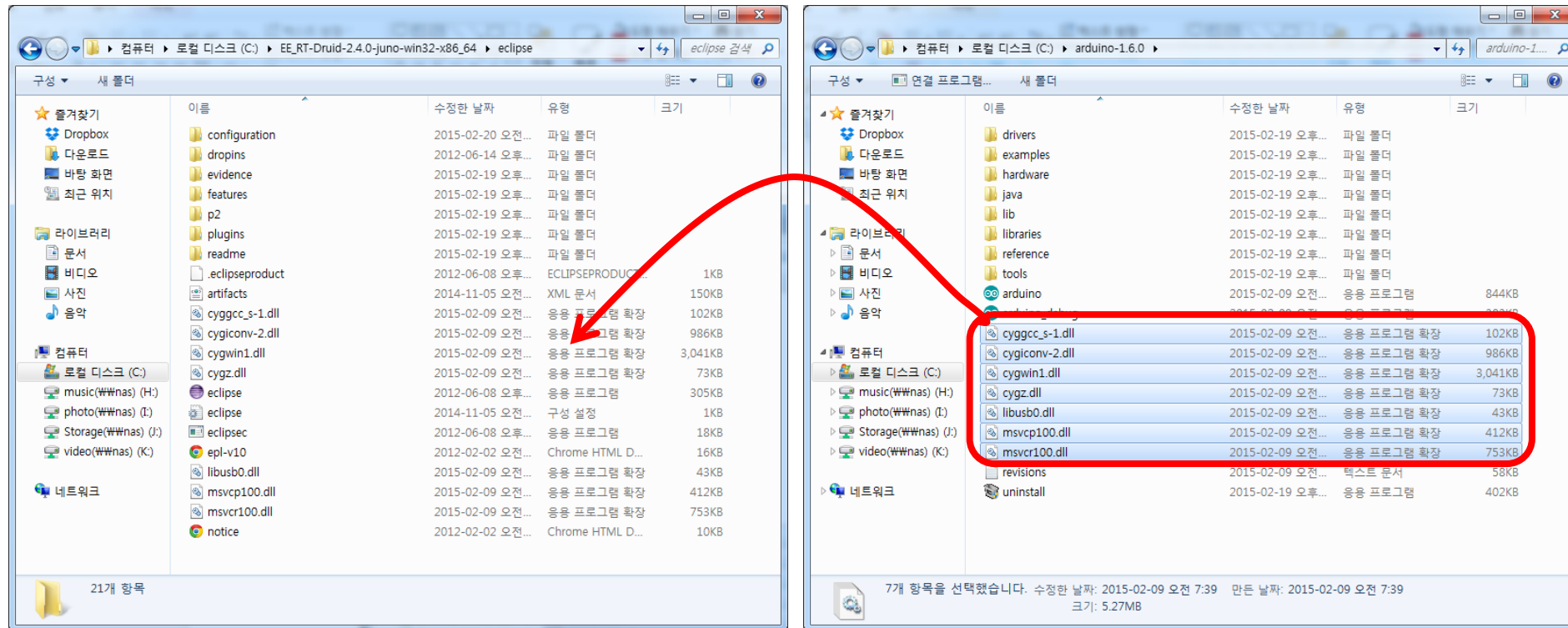공백에 유의할 것 !
COM뒤에 숫자는 본인 컴터에 맞게 수정
다음 장의 예시 확인 !**

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# Run -> External Tools -> External Tools Configurations 추가 (예시)



파일 경로를 확인하고 공백에 유의할 것 !

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# Cygwin dlls eclipse 디렉토리에 복사 (avrdude 실행에 필요)

# Eclipse에서 Help -> Install New Software

http://download.eclipse.org/releases/kepler

# Eclipse에서 Help -> Install New Software

http://rxtx.qbang.org/eclipse



http://mcuoneclipse.com/2014/03/23/serial-terminal-view-with-eclipse-kepler/
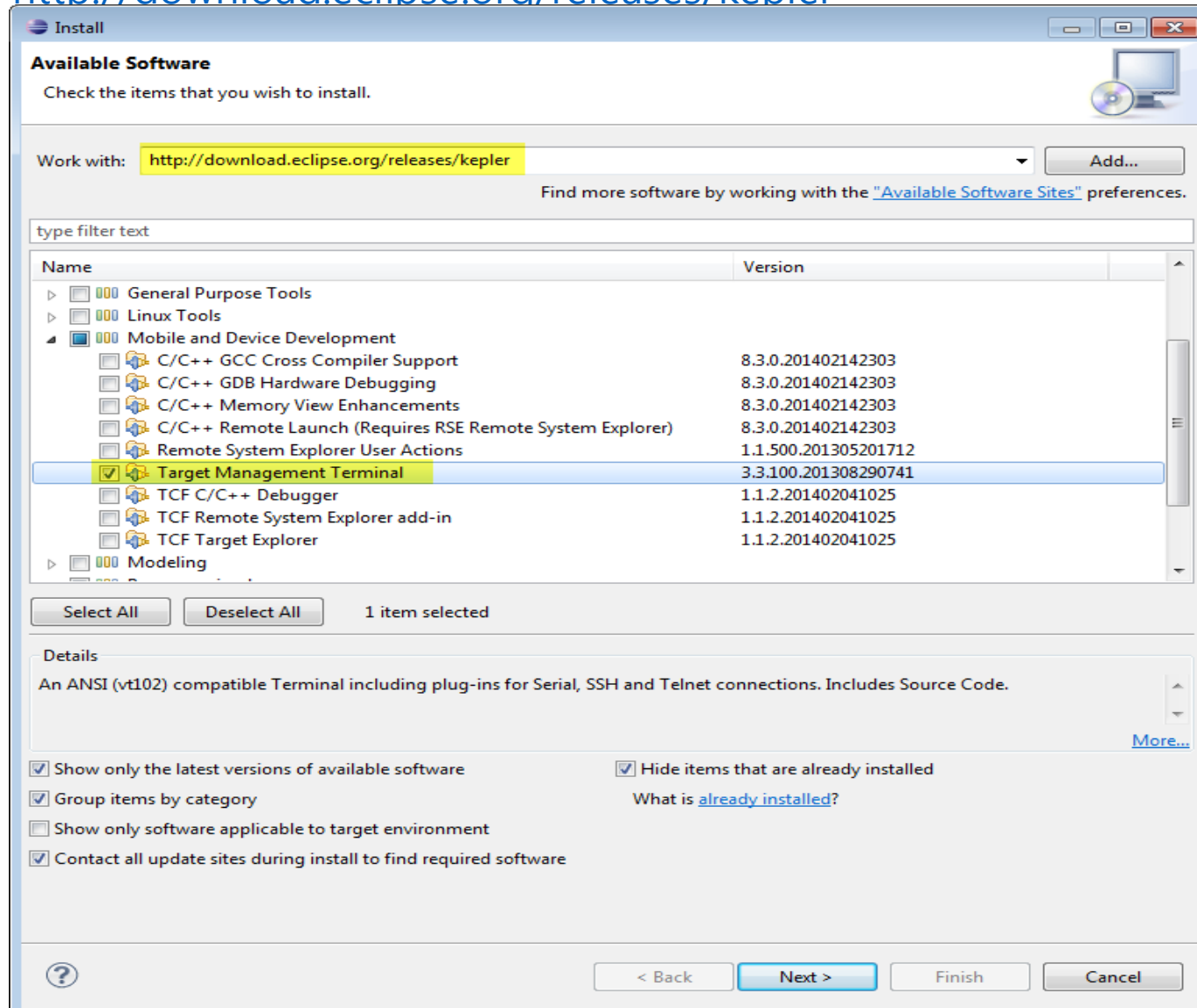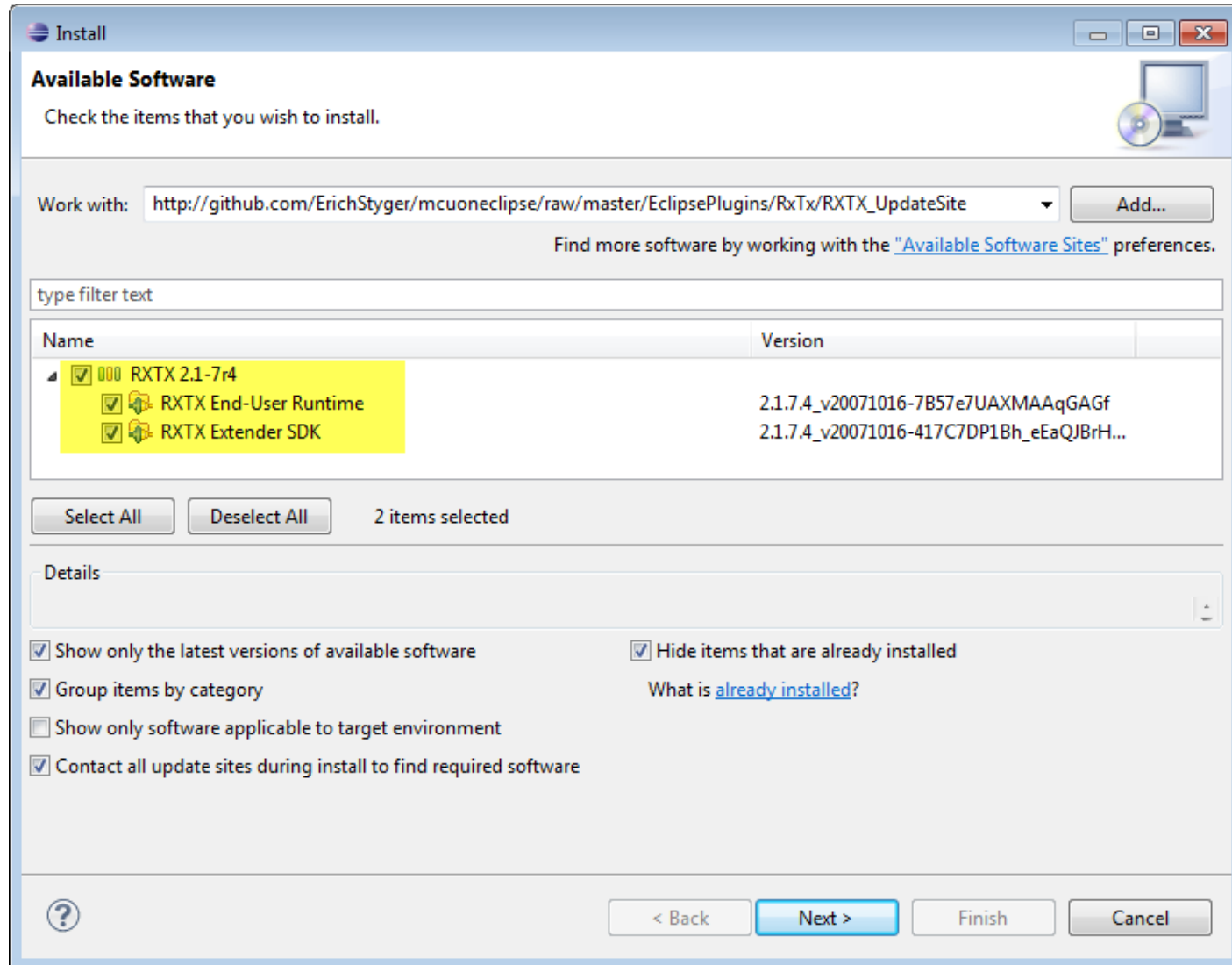
참고사이트.

# eclipse Demo 파일 만들기

eclipse 실행 -> New -> RT Druid Oil and C/C++ Project
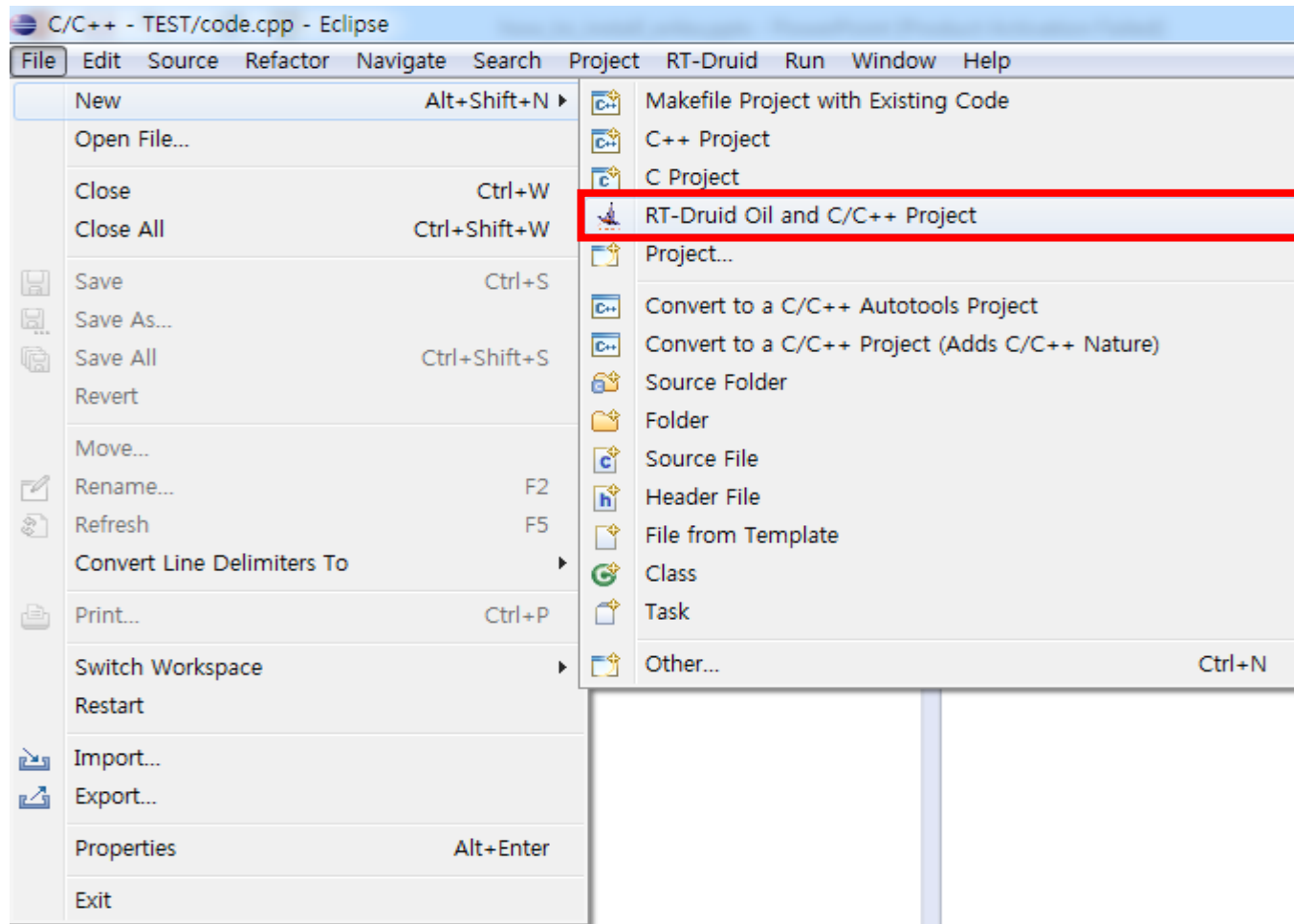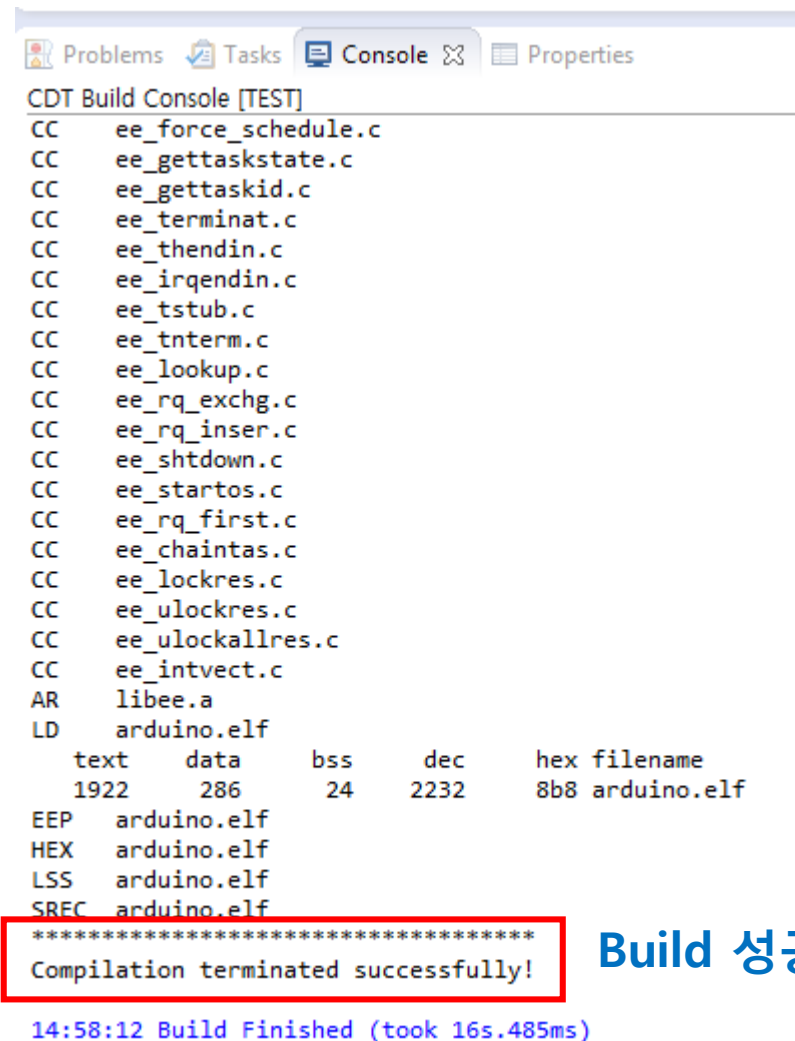
# eclipse Demo 파일 만들기

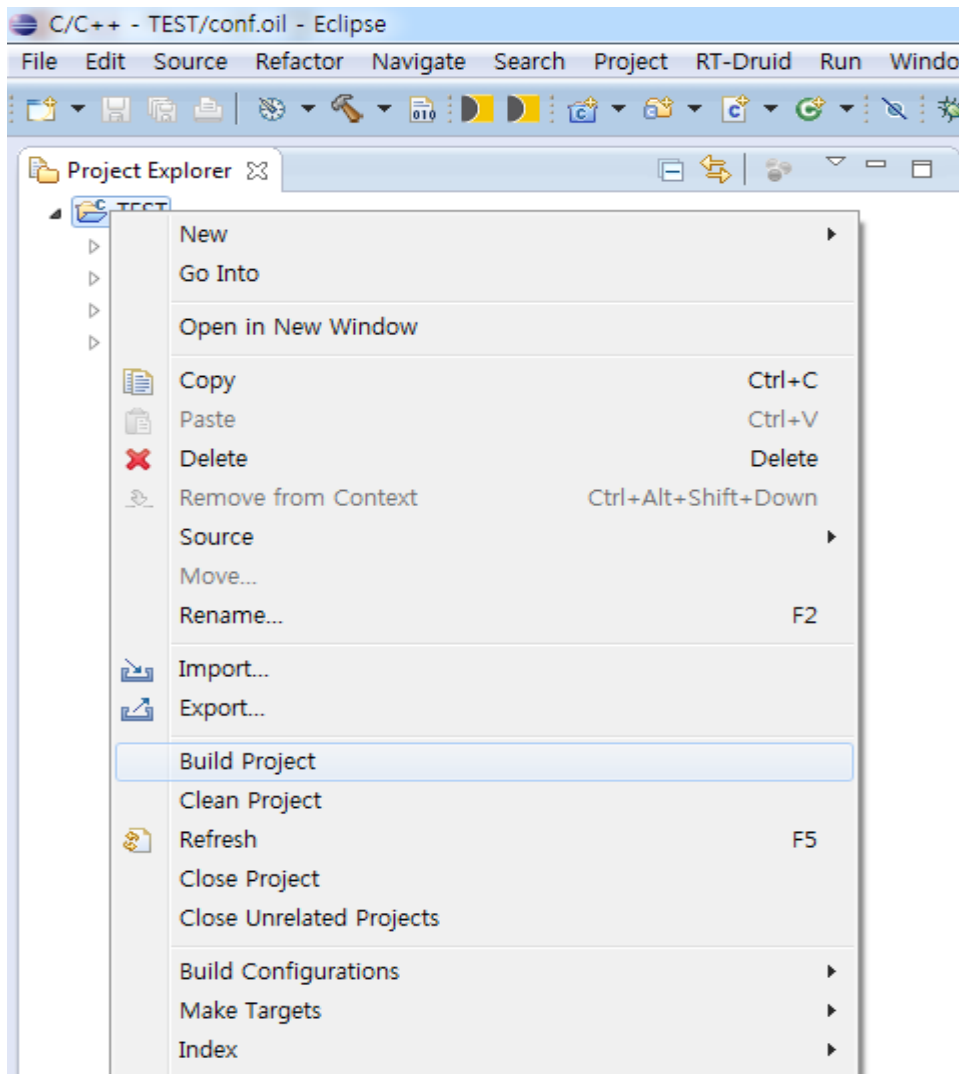Project name : TEST 후 Next 버튼 클릭
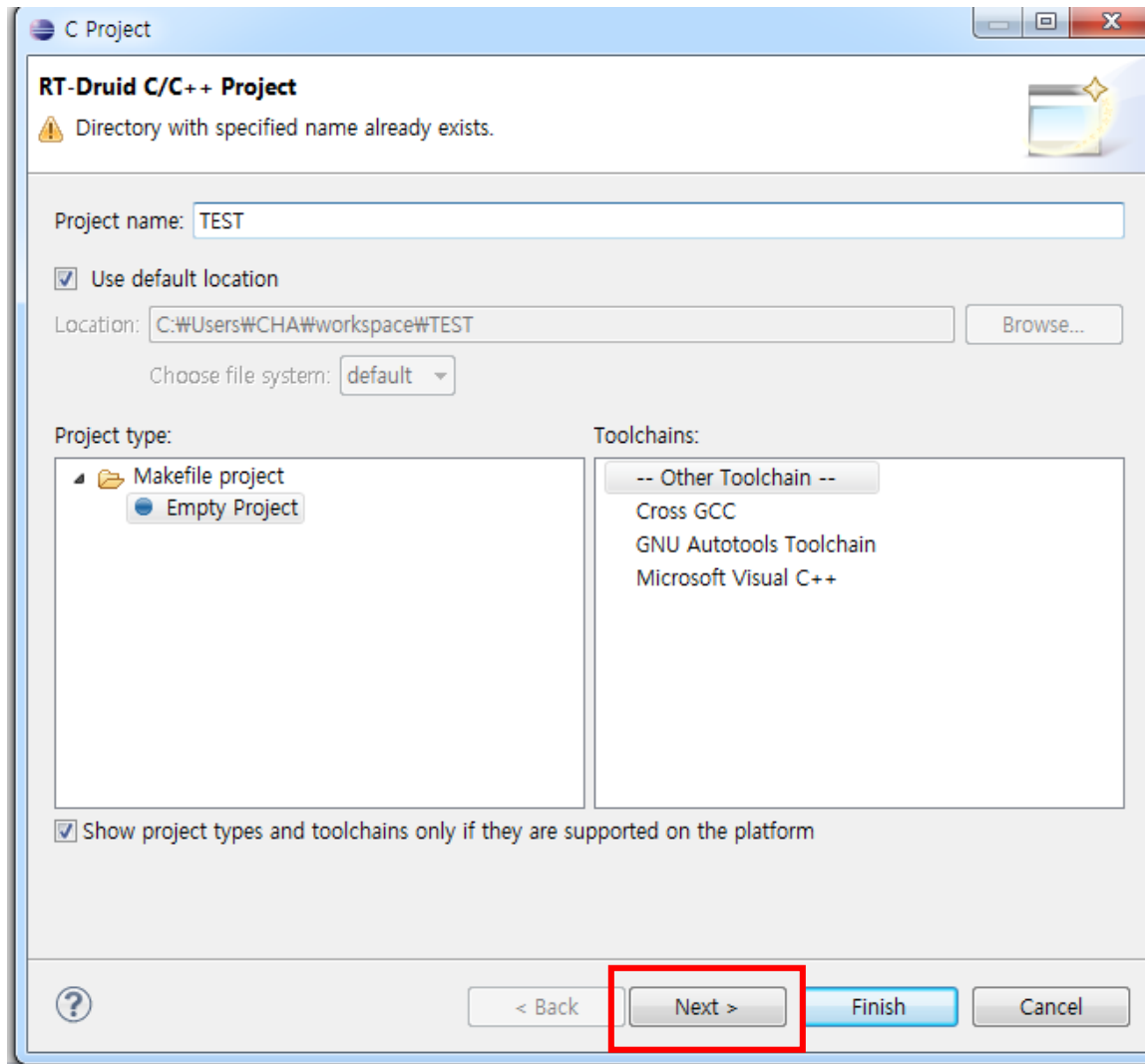
# eclipse Demo 파일 만들기
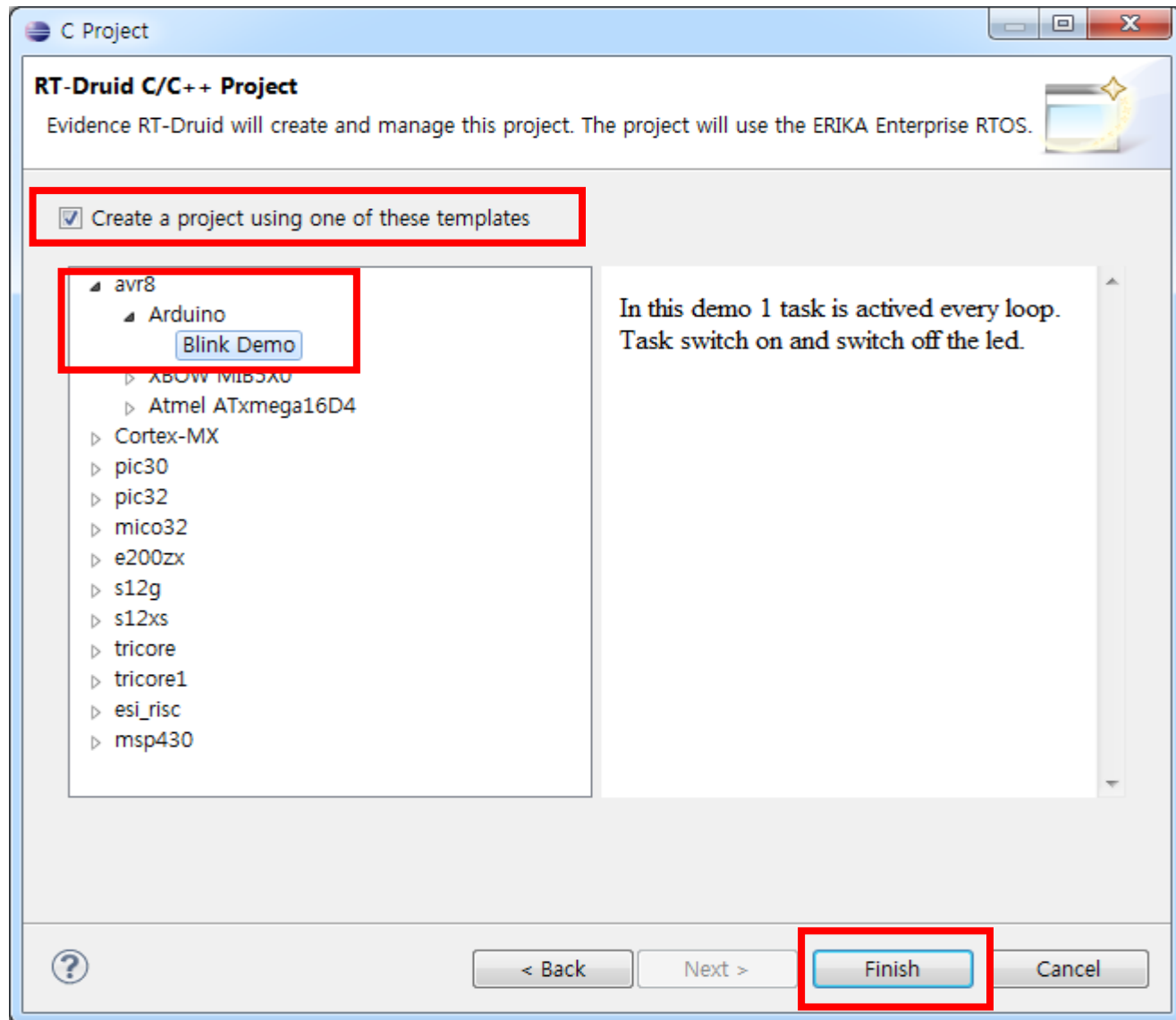
# eclipse Demo Build
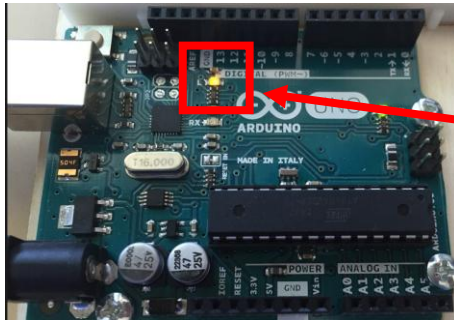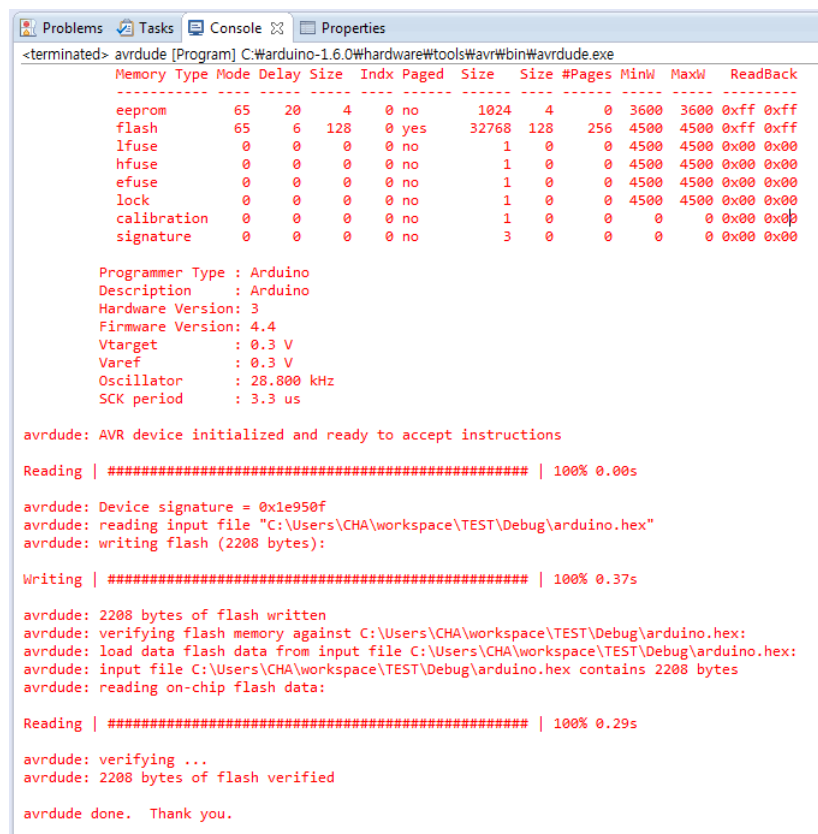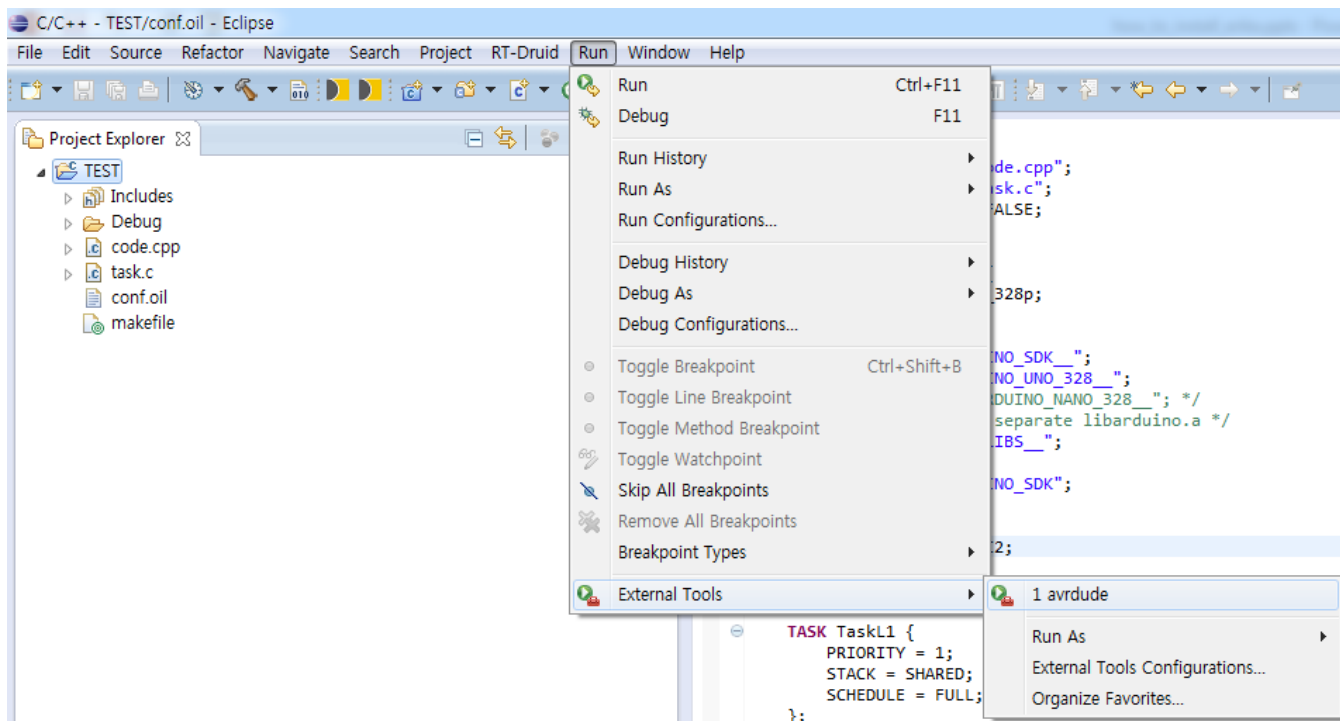
TEST 우클릭 후 Build Project 클릭



Build 성공시 나오는 문구

# Arduino에 업로드

Run -> External Tools -> avedude 클릭



업로드 성공시 나오는 문구 !
보드의 LED가 깜빡거리는 것을 확인!

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# THANK YOU