

# How to do strict ANSI compilation on common platforms

## 1. How to get source code

- **Unix/Linux machine**
  - i) Download an example source code from <http://dynamo.ecn.purdue.edu/~bouman/grad-labs/lab1/data/C-code.tar>
  - ii) Ungroup the downloaded TAR file by Unix command 'tar xvf C-code.tar'
- **PC with Window OS**
  - i) Download an example source code from <http://dynamo.ecn.purdue.edu/~bouman/grad-labs/lab1/data/C-code.tar>
  - ii) Ungroup the downloaded TAR file using file compressing tool like 'WinZip' or 'WinRAR'

## 2. How to compile source files with strict ANSI/ISO C standard conformance

- **Unix/Linux machine with 'gcc' compiler**
  - i) Contents of Makefile in C-code directory

```
# For Linux or any machines with gcc compiler
CC = gcc
CFLAGS = -ansi -Wall -pedantic

# For SunOS
#CC = cc
#CFLAGS = -Xa

all: Example

clean:
    /bin/rm *.o Example

OBJ = tiff.o allocate.o randlib.o

Example: Example.o $(OBJ)
    $(CC) $(CFLAGS) -o Example Example.o $(OBJ) -lm
```
  - ii) Type 'make Example'
  - iii) Type 'Example img03.tif'

- **Unix machine with 'cc' compiler (No 'gcc' compiler)**

- i) Contents of Makefile in C-code directory

```
# For Linux or any machines with gcc compiler
#CC = gcc
#CFLAGS = -ansi -Wall -pedantic
```

```
# For SunOS
CC = cc
CFLAGS = -Xa
```

all: Example

```
clean:
    /bin/rm *.o Example
```

OBJ = tiff.o allocate.o randlib.o

```
Example: Example.o $(OBJ)
    $(CC) $(CFLAGS) -o Example Example.o $(OBJ) -lm
```

- ii) Type 'make Example'  
iii) Type 'Example img03.tif'

- **PC with MS Visual Studio 5.0/6.0**

- i) From the 'File' menu, click 'new' → 'projects'  
Click 'Win32 console application'  
Input 'location' and 'project name' → click 'OK'  
Click 'an empty project' → click 'finish' → click 'OK'
- ii) From the 'Project' menu, click 'add to project' → 'files'  
Highlight all files (\*.c and \*.h) in C-code directory and click 'OK' button (or one by one)
- iii) Setting compiler option as ANSI C standard  
From the 'Project' menu, click 'settings' → 'C/C++'  
Click 'Customize' in the 'category' box  
Check box selected for 'Disable language extension' → click 'OK'
- iv) From the 'Project' menu, click 'setting' → 'debug'  
Input program arguments in 'Program arguments' box → click 'OK'
- v) From the 'Build' menu, click 'build'
- vi) From the 'Build' menu, click 'execute'