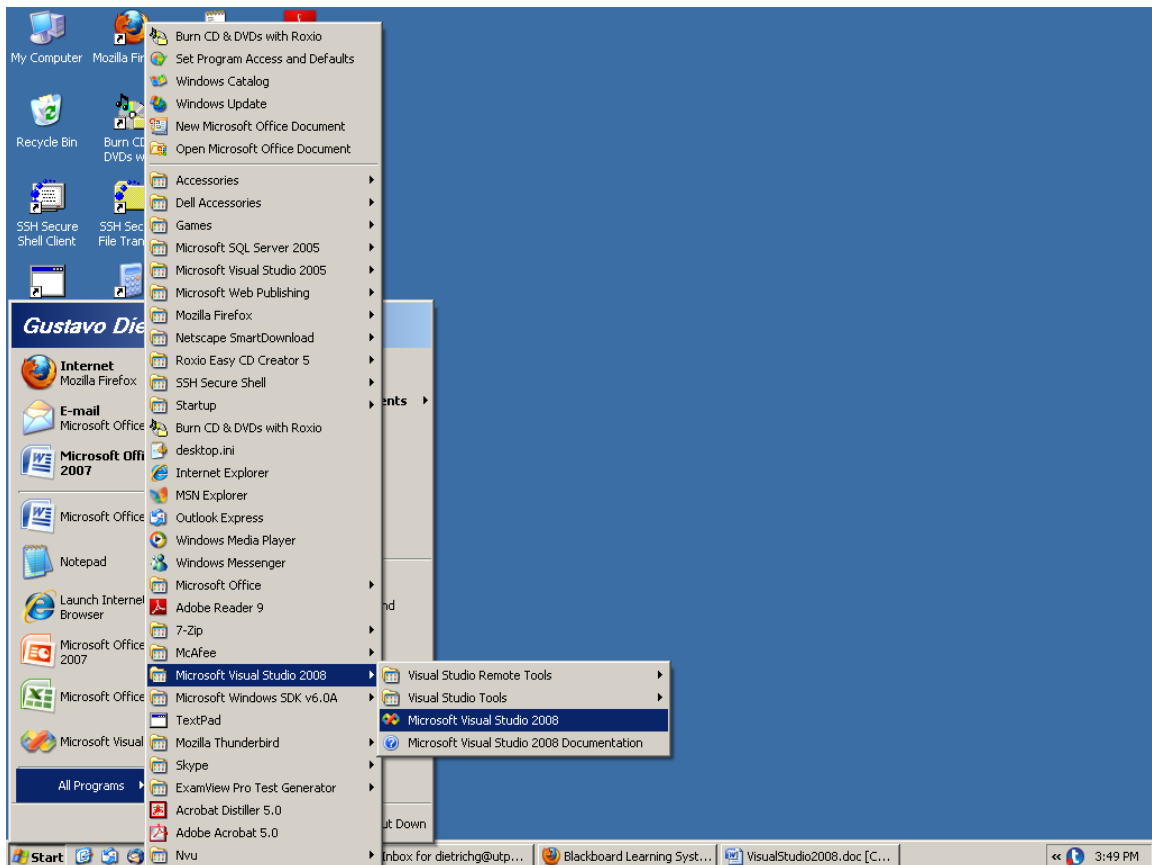


## Introduction to the use of the environment of Microsoft Visual Studio 2008

### Steps to work with Visual Studio 2008

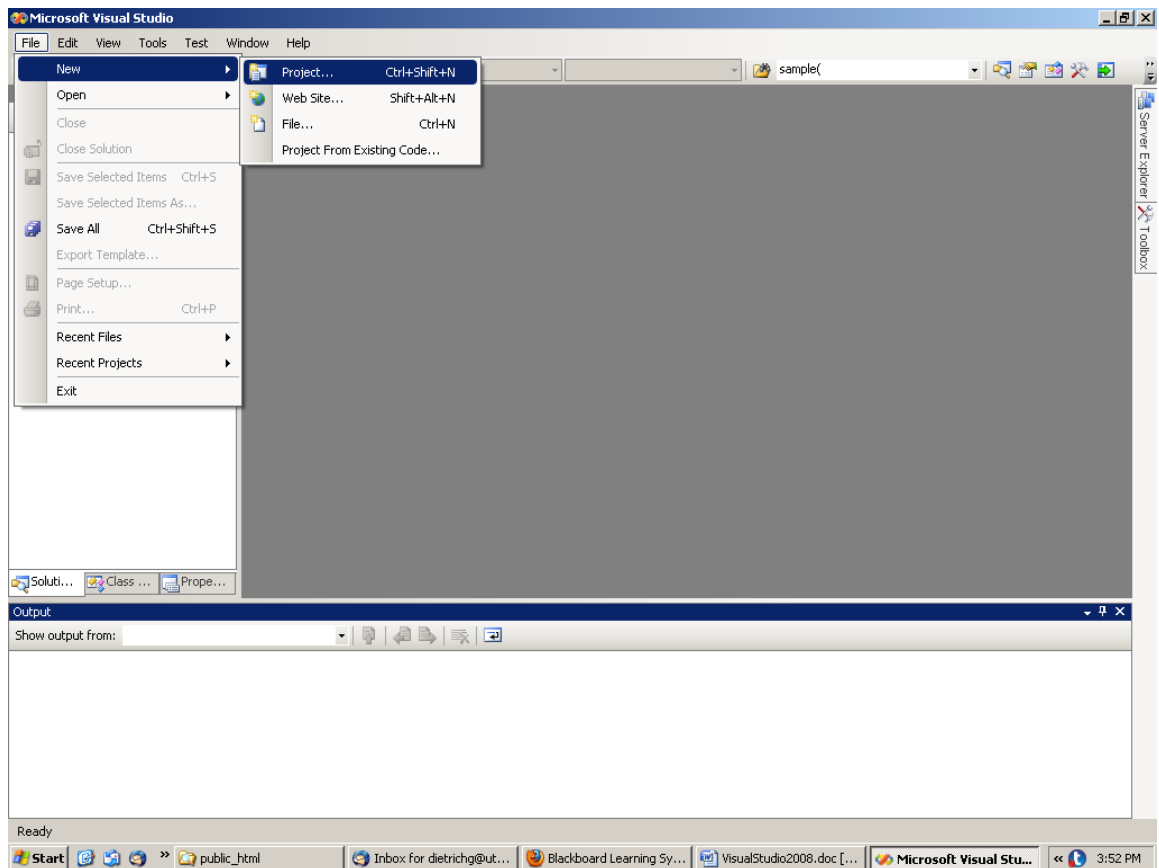
- 1) Start Visual Studio 2008. To do this you need to:
  - a) Activate the Start menu by clicking the Start button at the lower-left corner of your screen.
  - b) Set the mouse pointer on top of the **Programs** option to allow Windows to display a submenu with more options.
  - c) Without clicking the mouse, move the mouse pointer on top of the **Microsoft Visual Studio 2008** option to allow Windows to display a submenu with more options.
  - d) Set the mouse pointer on top of **Microsoft Visual Studio 2008** and now click the mouse.



You will see Visual Studio 2008 window displayed on the screen. Close the **Start Page**.

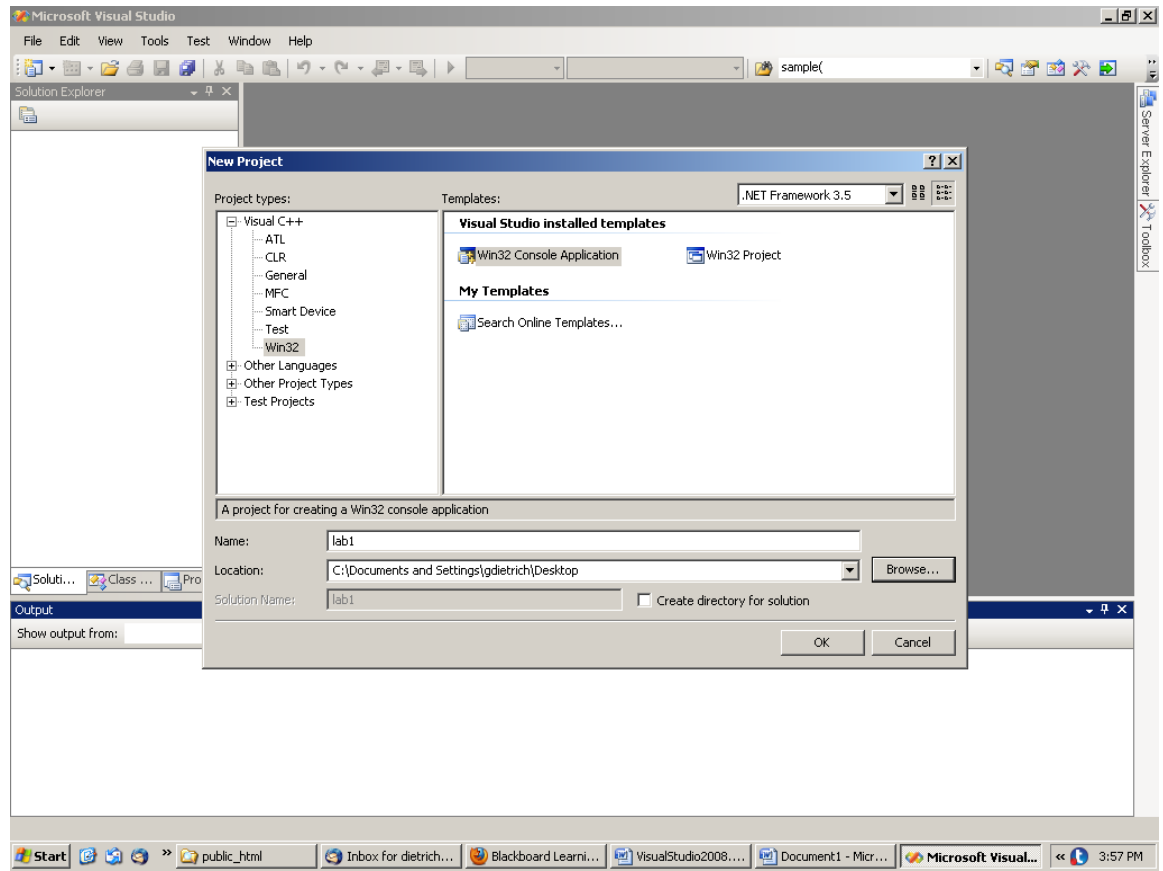
- 2) Create a new Visual Studio 2008 project  
Click the menu item **File**, and select **New | Project**. Now a "**New Project**" dialog window pops up.

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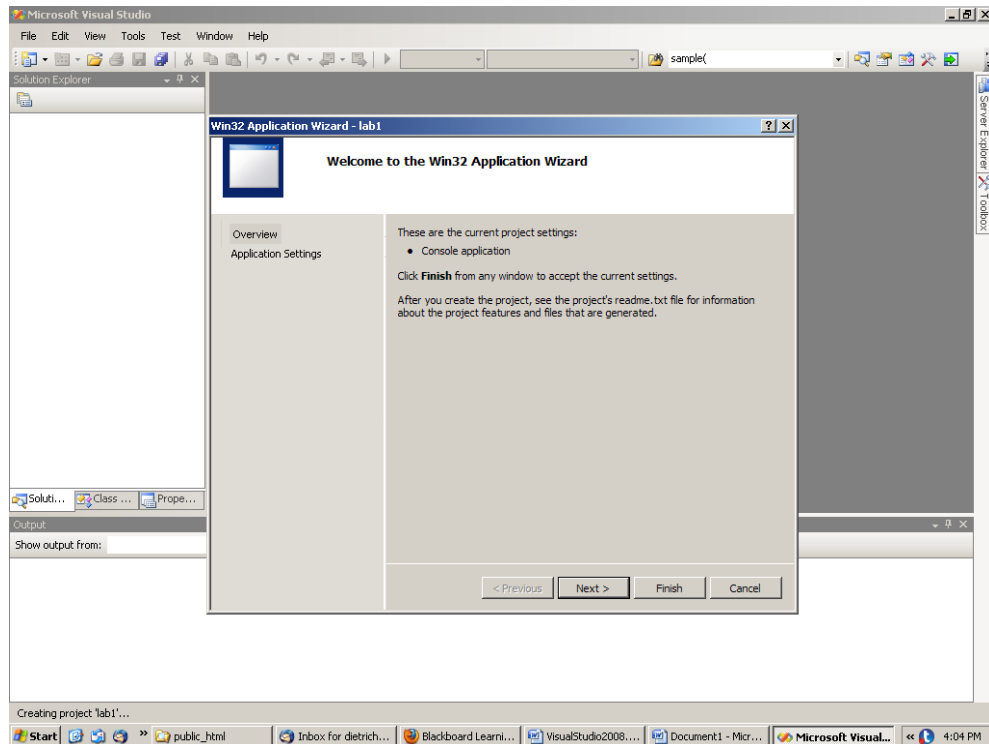


- a) In the left pane, under Project types under Visual C++, select **Win32**
- b) In the right pane, select **Win32 Console Application**
- c) In the **Name:** text box at the bottom of the window, enter your **project name**, **LabX**, where X is the assignment number
- d) In the **Location:** text box, you can browse to the Location where you want to Create your project. This can be the Desktop or a folder on your hard disk.
- e) Uncheck the check box **Create directory for solution.**

## Introduction to the use of the environment of Microsoft Visual Studio 2008

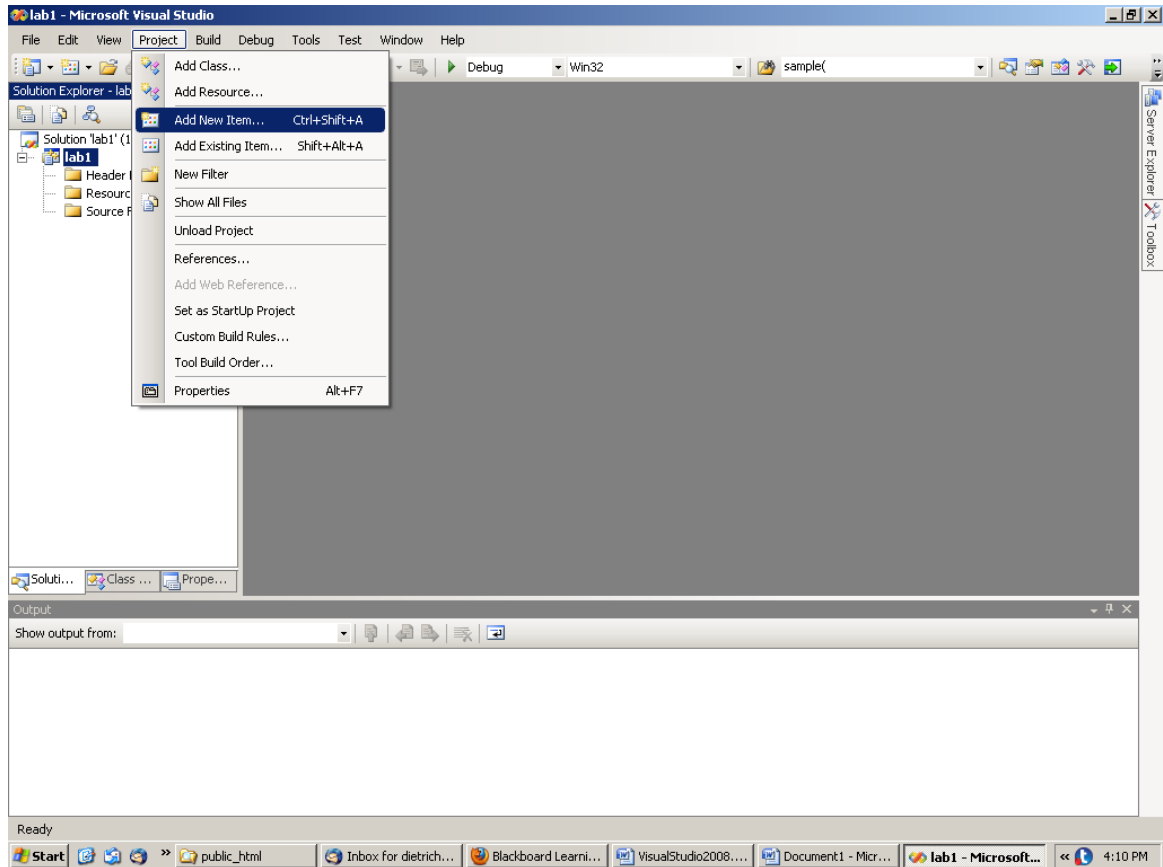


- f) Click **OK** to continue.  
Now another dialog window (**Win32 Application Wizard – LabX**) pops up.



## Introduction to the use of the environment of Microsoft Visual Studio 2008

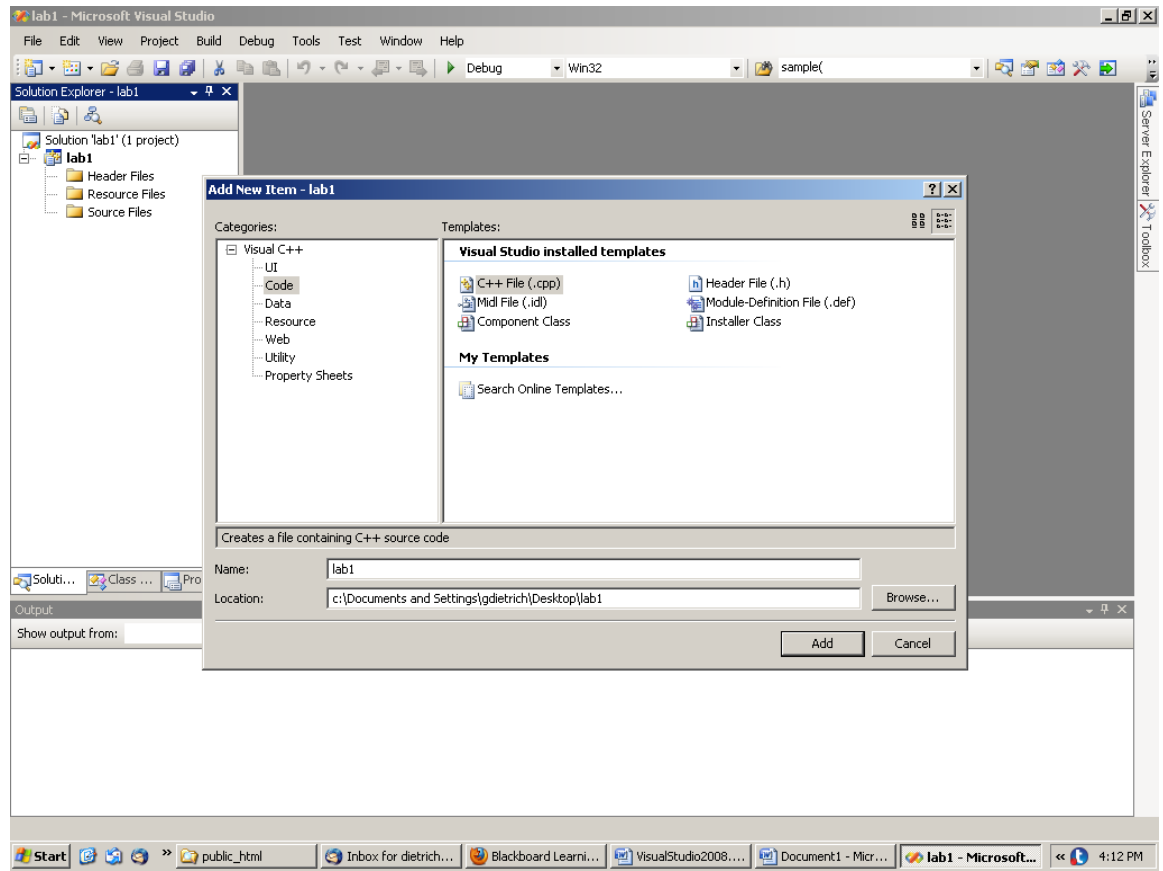
- g) Click Next or **Application Settings** on the left side of the window
  - h) Check the **Empty project** box
  - i) Click the **Finish** button to create an empty project for you to store your C++ programs
- 3) Add a program file to your project  
Click the menu item **Project**, and then select **Add New Item ...**



Now an “Add New Item - LabX” dialog window pops up.

- a) In the categories window on the left, click on **code**
- b) Select **C++ File (.cpp)** from the list on the right pane
- c) Type your program name (ex. **Hello**) in the text box labeled **Name:** at the bottom of the screen
- d) **Note:** The location should be the location you selected in step 2 d. Notice it formed LabX with a subdirectory also named LabX. [ \LabX\LabX] Make a note of this path in case you need to locate your program and data files.

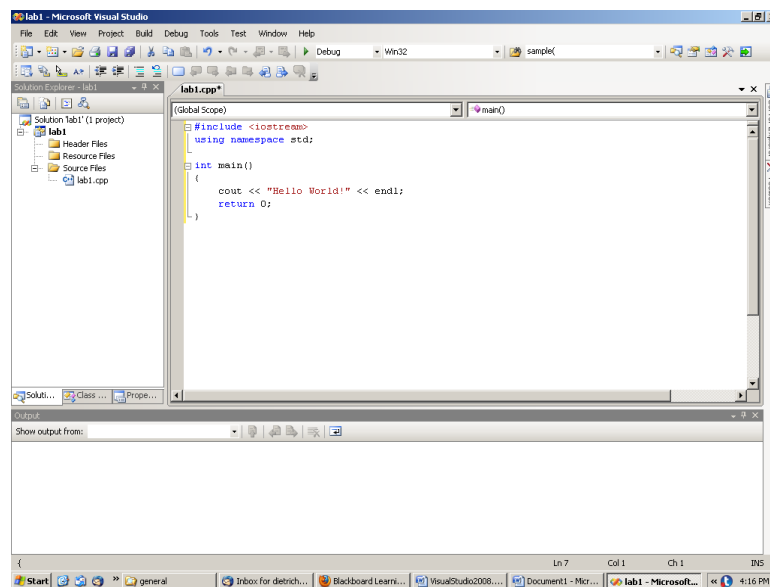
## Introduction to the use of the environment of Microsoft Visual Studio 2008



e) Click the **ADD** button, and you will be in the program edit mode

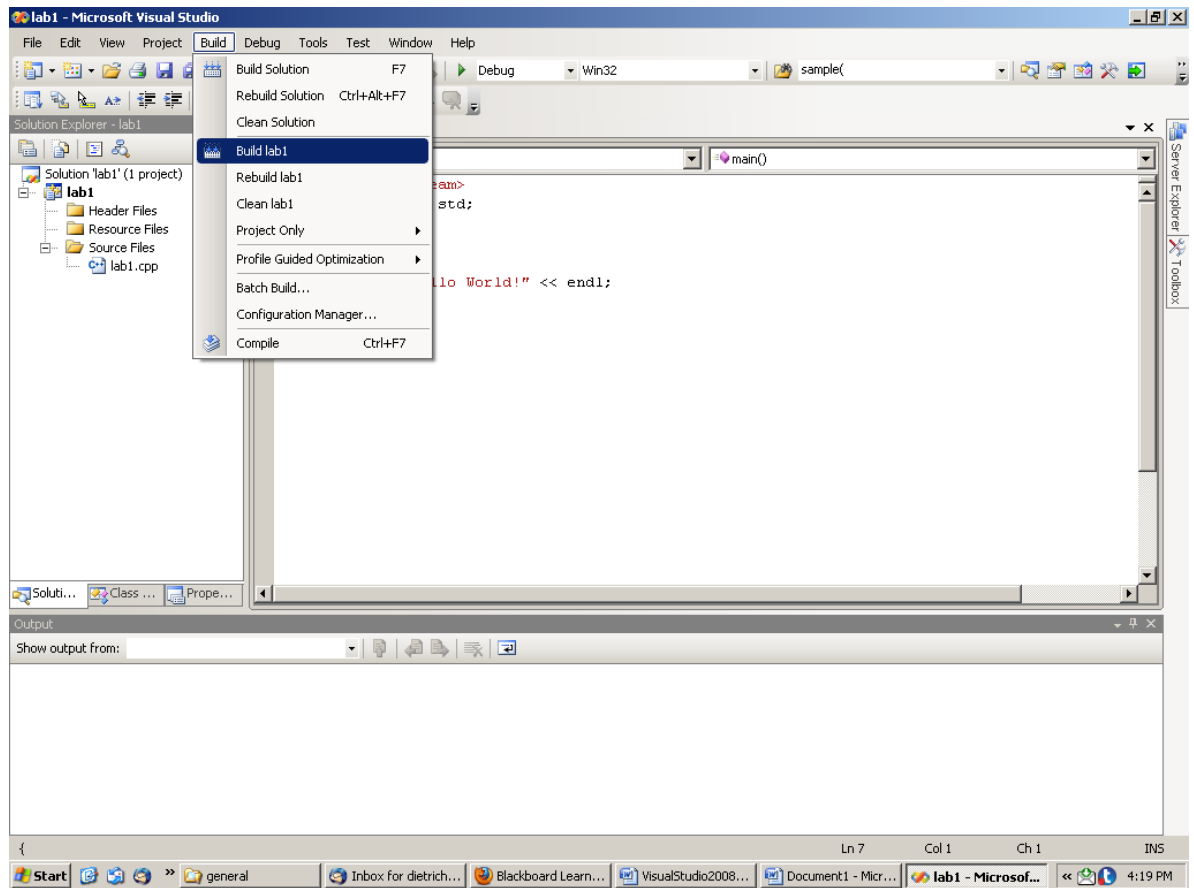
4) Type in your program

Now you can type your program in the middle **workspace or cut and paste from a preexisting file**. If you want, you can save it by selecting SAVE from the File menu, but it will be automatically saved when you do step 5, or you will be prompted when you exit VisualStudio2008.



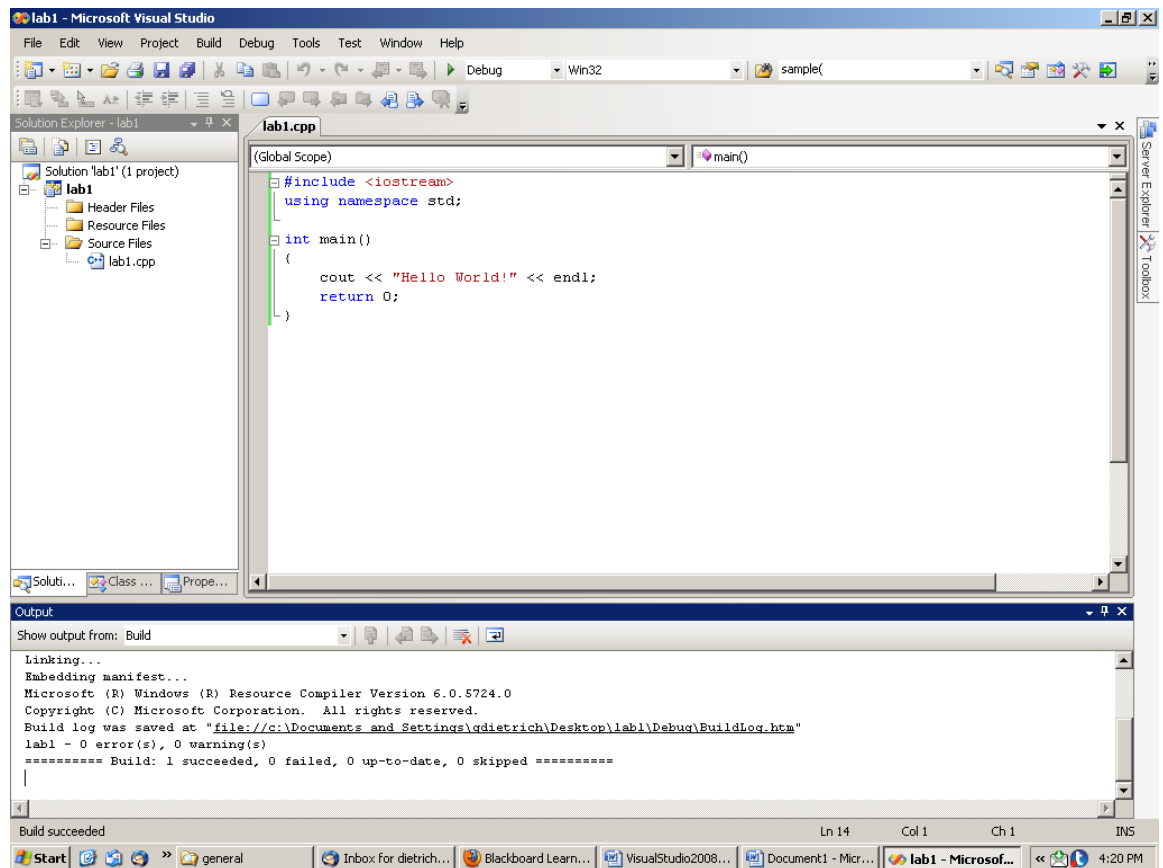
## Introduction to the use of the environment of Microsoft Visual Studio 2008

- 5) Build the executable file
- Click on the **Build** command in the main menu bar, and select the forth item **Build LabX** (here LabX is your project name)



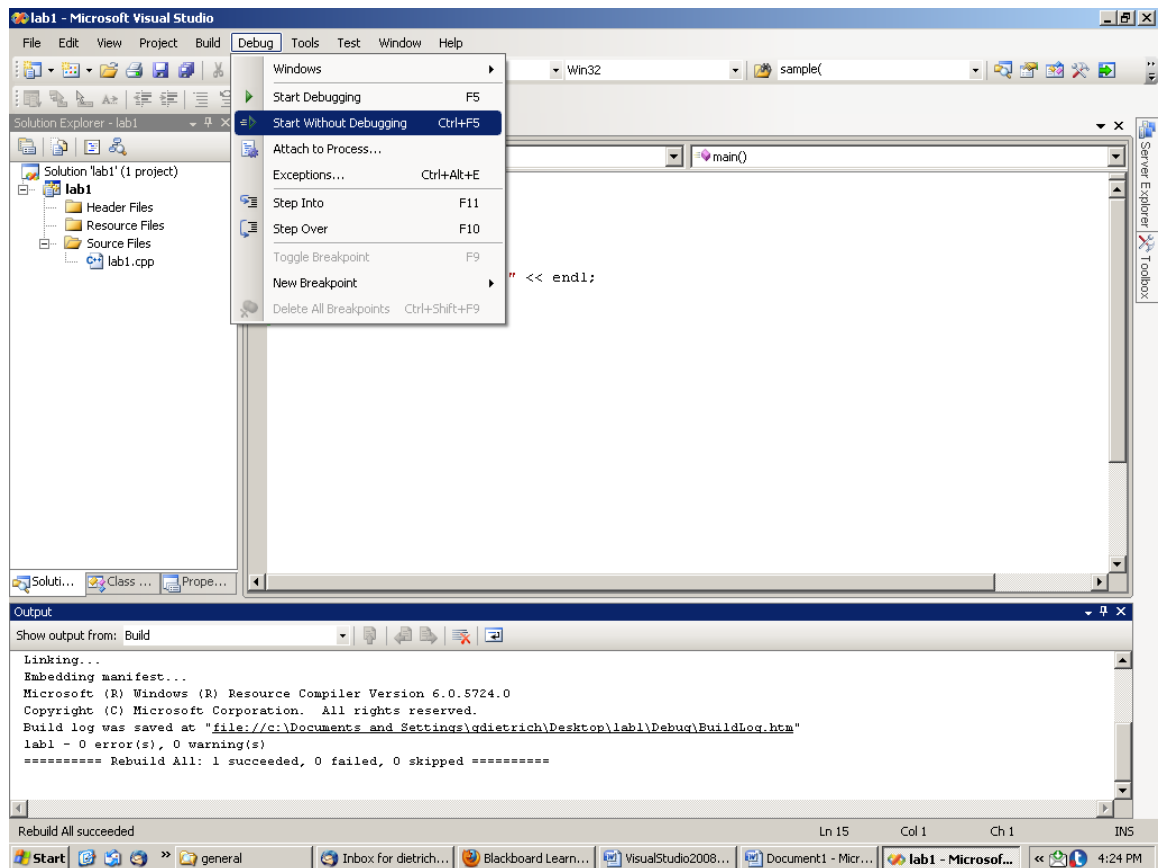
- If your program passes the VC++ compiler, you can see the message "**Build: 1 succeeded, 0 failed, 0 skipped**" from the bottom **Output** window. This means that you have created the executable file that is stored in the **Debug** folder that is in your project folder **LabX**.

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- c) If syntax errors are found, they will be listed in this **Output** window. Double click on an error message to get a pointer in the source program window showing where the error was found.
  - d) Fix the first error in the list and **rebuild** your program (in some occasions many of the following errors will disappear because they were "produced" by the first one).
  - e) Repeat the above four steps until your program is error free.
- 6) Run your program. Now you have 2 ways to do this:
- a) Click on the **Debug** option of the menu bar, and then select the **Start Without Debugging** option (**do not** select **Start** option here)
  - b) Press **Ctrl+F5**.

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Note: You can combine steps 5 and 6. Select Start Without Debugging. If you have made changes to your program, you will get a window, asking you if you want to rebuild. Click on YES, and it will rebuild and if successful, run your program. If not successful, it will prompt you if you want to run the “last successful build”, Select No. and continue to make corrections to your program.

- 7) If you need to print your file, click on the window where you have your source code to make it the active window, click on the **File** option of the Menu bar and then select **Print** from the drop-down menu.

Visual Studio 2008 creates a subfolder called **Debug** under the folder where the source program was saved (it is the project folder) and puts many files inside it. One of those files is the executable file that corresponds to your program (it has the extension “.exe”). If you work on the Academic Service Building (ACAS) computers, **BEFORE** you log off, you **MUST** save the most important files on a flash drive or other external storage device. Your most important files are:

1. The source program file. It has the extension “.cpp” and should be found in the folder that you created.
2. The header files that you created (if any). They have the extension “.h” and should be found in the folder that you created.
3. The input files that you created to be used by your program (if any).
4. The output files produced by your program (if any).

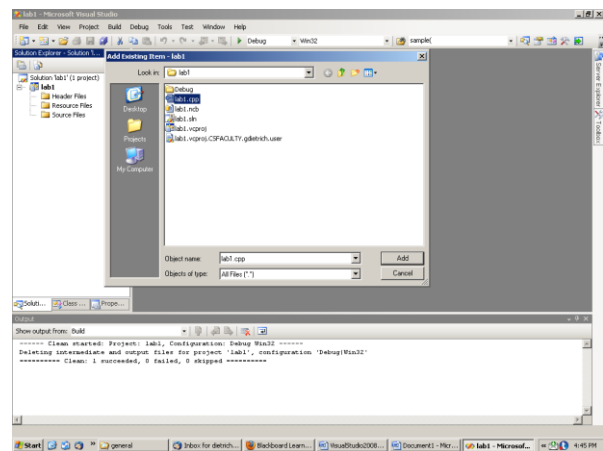
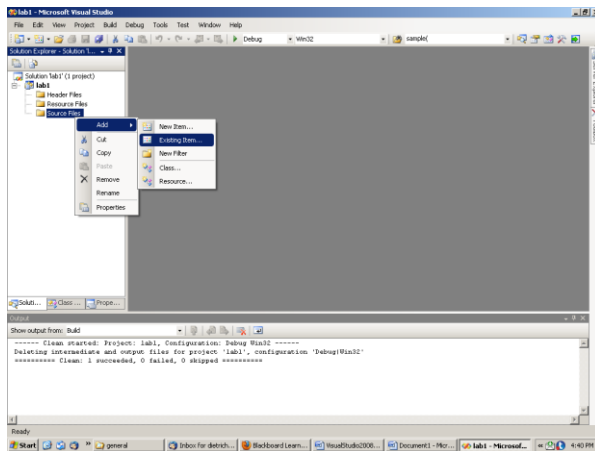
### Steps to work with Visual Studio 2008 with an existing .cpp file

1. Complete Steps 1) and 2).
2. Copy the existing file to the LabX\Labx subfolder you created in Steps 1) and 2).



## Introduction to the use of the environment of Microsoft Visual Studio 2008

3. In the solution Explorer pane, right click on Source Files, and select Add, click on Existing Item. Select your existing file and Click on the **Add** button. Your source code file should be listed in the Solution Explorer pane for LabX. DoubleClick on your source file to open it for editing.



**Note for advanced projects** using header files. If you are using .h files, right click on **Header Files**, select Add Existing Item, and select your .h files. If the implementation file is a separate .cpp file, Right click on **Source Files**, select ADD Existing Item, select the implementation .cpp file.

5. Make any changes to the source files if necessary and rebuild your project.

### To work with files in your program

1. If your program reads from an input file, create the file and save it in the **LabX** folder before running the program. Visual Studio expects the input file and the output file to be in the same folder where the project files are. You can use a full path name (for example, **c:\myfiles\input.txt**) in your program to work with files from other folders.
2. If your program writes to an output file, it will be in the **LabX** folder (unless you use a full path name). You can open this folder by Selecting Open File from the File menu. Select **“Text Files (\*.txt)”** or **“All Files (\*.\*)”** from the **Object of type:** drag down menu to display the list of files.

**NOTE:** If you run your program using the .exe file, the input file and output file must be in the same folder of the .exe file.

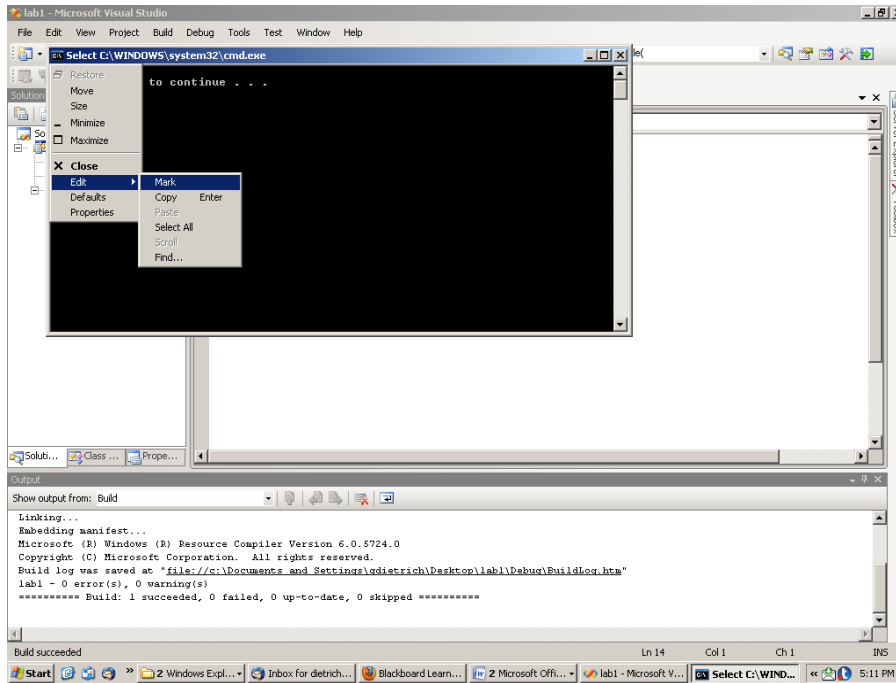
### To get a printout of the program output sent to the screen

While the console window is open you can do a graphic screen captures [press the **Print Screen** key, then paste into word processor] Note: no message will be displayed after pressing Print Screen, but the graphic image will be saved to the clipboard, ready to be pasted into any software that will accept graphic images] Because the console window is black, this uses a lot of printer ink.

Better alternative is to capture the output as text:

While the console window is open pull down the DOS icon at the upper left of the output window, select Edit > **Mark**.

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Select the text with the mouse and press Enter to copy. Open a plain text editor and paste it in a new file.

