ME 172

0

C Programming Language Sessional Lecture 1

by Hafijur Rahman

0.75 Credit Hours Sessional based on ME 171



Grading

ltems	Percentage
Attendance	10%
Class Performance / In-class Exercises	20%
Assignment	20%
Final Test	50%
Total	100%



Rules

- You must come to the class before starting time.
- Don't copy assignments directly from others. What you submit MUST be your own work unless it is specified as a group submission
- Must submit your assignment on the due date.
- Everyone must sign a cover page and provide bullet point summaries of what you worked on.
- You must come to the class with prior preparation.

Rules for collaboration

- You should work together & learn from one another .
- You MUST acknowledge the contribution of others .

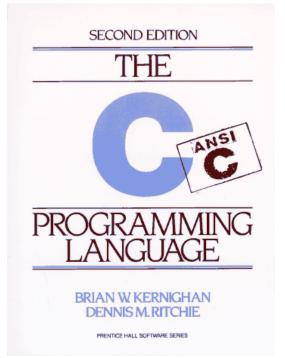
No credit will be lost if the response is correct, the acknowledgment is made, and no direct copying of the other

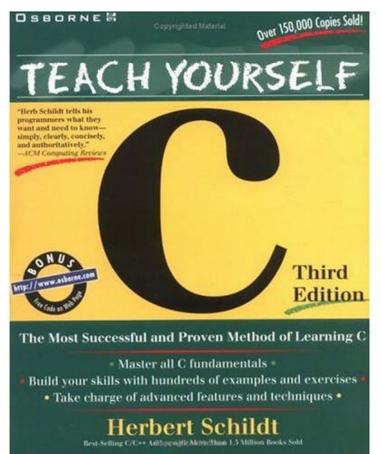
Introduction

- Low-level, yet structured (Middle-level)
- Procedural
- Multiplatform/Portable
- Powerful
- C complex- C is not a good learning language!!!!

Introduction to C (cont.)

- Versions of C
 - "Kernighan and Ritchie" C
 - ANSI C
 - C++





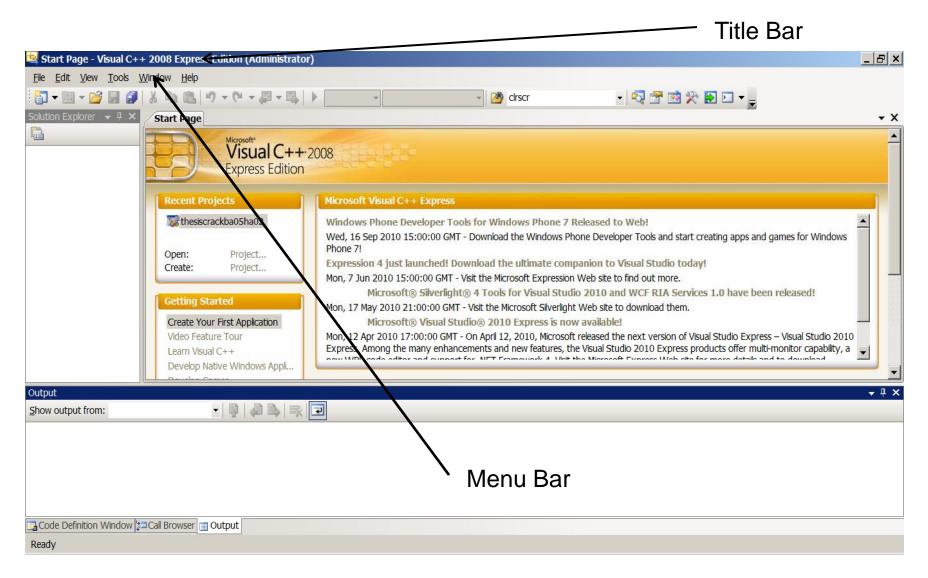
The C Programming Process

- I. Coding
- 2. Compiling
- 3. Testing (running)
- 4. Repeat I-3

Code will be developed and Compiled using Microsoft Visual C++ 2008 Expression

How to open a project and a File in Microsoft Visual C++ 2008 Expression

Complete Window of the compiler



On the File menu, point to New, and then Click Project:

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

🚔 St	art Page - Visual C++ 2008 E	xpress Edition (Admi	nistrator)			_ & ×					
File	Edit View Tools Window	Help									
	New	Project	Ctrl+Shift+N	🔹 🗸 🖓 cirscr	- 🔩 🚰 🐋 🎘 🖬 🖛 🖕						
	Open 🕨	File	Ctrl+N			- X					
	Close	Project From	Existing Code								
đ	Close Solution	Visual									
	Save Selected Items Ctrl+S	Express E	dition								
	Save Selected Items As	t Projects	Le Microsof	oft Visual C++ Express							
1	Save All Ctrl+Shift+S	esiscrackba05ha02			7 Palaccad to Wahi						
	Page Setup	-ESISCI ACKDAUSI IAUZ		Windows Phone Developer Tools for Windows Phone 7 Released to Web! Wed, 16 Sep 2010 15:00:00 GMT - Download the Windows Phone Developer Tools and start creating apps and games for Windows Phone 7!							
8	Print Ctrl+P	Project									
	Recent Files	Project		sion 4 just launched! Download the ultimate co Jun 2010 15:00:00 GMT - Visit the Microsoft Express	and the second se						
	Recent Projects	g Started			udio 2010 and WCF RIA Services 1.0 have been release	ed!					
	Exit			May 2010 21:00:00 GMT - Visit the Microsoft Silverli	5						
_		eo Feature Tour		Microsoft® Visual Studio® 2010 Express is r Apr 2010 17:00:00 GMT - On April 12, 2010, Microsoft	now available! soft released the next version of Visual Studio Express – Visual	Studio 2010					
		arn Visual C++	Express.	. Among the many enhancements and new features	, the Visual Studio 2010 Express products offer multi-monitor	capability, a 📕					
	Dev	velop Native Windows A		Code offer and cuppert for hit I transport 4 16	of the Merseeff Lyprose Men are for more details and to dow						
Outp	ut	inden finnen				→ ₽ ×					
	output from:	• 🖗 🕼) R 2								

Ready

New project dialog box will appear

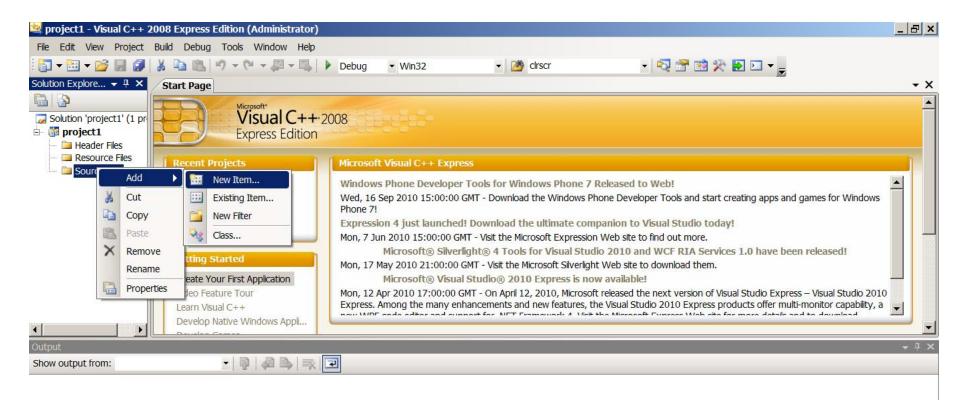
	New Project		<u>? ×</u>
	Project types:	Templates:	
Select the	Visual C++ CLR Wie32 General	Visual Studio installed templates Win32 Console Application My Templates Search Online Templates	
location in which you want to save your projects	A project for creating a Win Name: project1		
	Location: E:\\P10 Solution Name: project1		Finally Press (
			K Cancel
		In the name text box type pr must not start with digit. She any space within it.	•

Win32 Application wizard dialog box will appear

Win32 Application Wizard -	project1	<u>? ×</u>
C:	ion Settings	
Overview Application Settings	Application type: © Windows application © Console application © DLL © Static library Additional options: W Entry project Export symbols	Add common header files for:
		Click on Console application and Empty project
		<pre> Finally Press Finish < Previous Next > Finish Cancel </pre>

Go to the solution Explorer and open a File:

Solution Explorer \rightarrow Source Files (Press Right click on it) \rightarrow Add \rightarrow New Item



Code Definition Window 🔚 Call Browser 🗐 Output	
Ready	

Add new item dialog box will appear:

dd New Item - projec	1	? :
<u>C</u> ategories:	Templates:	
Visual C++ UI Code Property Sheets	Visual Studio installed templates C++ File (.cpp) Component Class My Templates Cearch Online Templates.	File (.h)
	Select Code and C	C++ File (.cpp)
Creates a file containing C	++ source code	
lame: file1		
ocation: e:\P1	10001\project1\project1	Browse
		Add Cancel

Finally Press Add

Now file1.cpp file is ready to write a program:

🚔 project1 - Visual C++ 2	008 Express Edition	(Administrator)							_	- 8 ×
File Edit View Project	Build Debug Tools	Window Help								
🖥 🕶 🖼 🕶 🛃 🥔	x 🖻 🛍 🔊 -	(~ - ,,,, - ,,,, ▶ □	ebug 👻 Win32	2 🔹 🖄 drs	cr -	🗟 🕾 😒	• 🖸 🛃	- i 🖪 🗣 ⊾	A* 🛊 1	
Solution Explore 👻 🖡 🗙	file1.cpp Start Pag	je								- X
	(Global Scope)			•						•
Solution 'project1' (1 pr										•
Header Files										
Resource Files										
🖃 🗁 Source Files 🐏 file1.cpp										
Output	2010		_							• ‡ ×
Show output from:	• 4									
Code Definition Window	Call Browser 🖃 Outpu	ıt								
Ready						Ln 1	Col 1	Ch 1		INS
	1						V and the second		6:01	AM
🎝 Start	🛓 🐠						1 🌏 🛤 [F ()) 🔁 🕂	8/15/2	2011

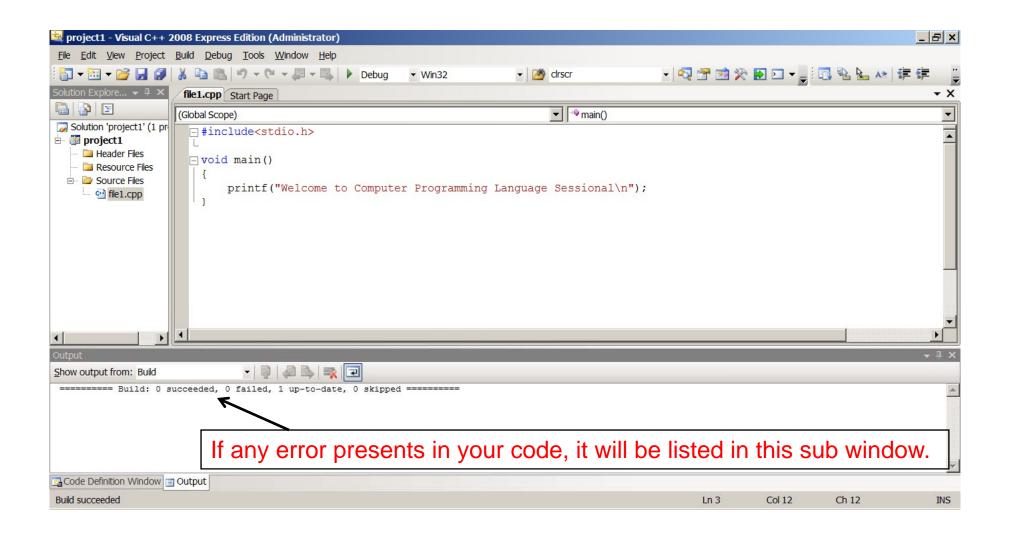
Write your code in the file.cpp file:

🛓 project1 - Visual C++ 2	008 Express Edition (Administrator)					_ B ×
<u>File E</u> dit <u>V</u> iew <u>P</u> roject	<u>Build Debug Tools Window H</u> elp					
i 🛐 🕶 🛅 🕶 📝 🎒	👗 🗈 🖺 🍠 🕶 🖓 🖛 🖓 🖛 💭 💭 Debug 🔹 Win32	- Marcina Cirscr	- 🗟 🖀 😒 🏷	💽 📼 🚽 🛄	🔁 🏊 🔺 🕯	
Solution Explore 7 ×	file1.cpp Start Page					- X
	(Global Scope)	▼ I® main()				•
Solution 'project1' (1 pr Project1 Header Files Resource Files Source Files File1.cpp	<pre>#include<stdio.h> L void main() { printf("Welcome to Computer Programming } </stdio.h></pre>	Language Sessional\n");				
<						• •
Output						⊸ ‡ ×
Show output from: Build	× P A R R					
						*
Code Definition Window	Call Browser 🔳 Output					
Item(s) Saved			Ln 6	Col 2	Ch 2	INS

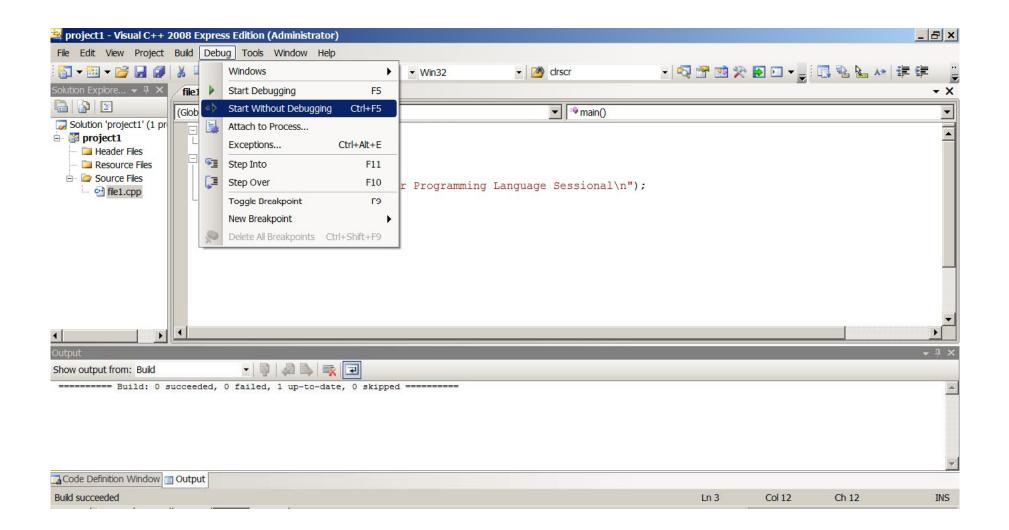
To compile your program, On the Build menu, click Build Solution.

🚔 project1 - Visual C++ :	2008	Express Edition ((Administrator)								_ 8 ×
File Edit View Project	Build	Debug Tools	Window Help	_							
i 🛐 🕶 🔛 🕶 🔛 🍠	***	Build Solution	F7		Debug	▼ Win32	- 🏄	drscr	- 🕺 🚰 🐋 🎌 💽 📼 🚽 🔤] 🐁 🏊 🗚 🗿	
Solution Explore 👻 🕂 🗙		Rebuild Solution	Ctrl+Alt+F7						2		- ×
		Clean Solution		F				✓ ■ main()			-
Solution 'project1' (1 pr		Build project1		F							•
Image: Project 1 Ima		Rebuild project1									-
Resource Files		Clean project1									
Source Files		Project Only	+	0	Computer	Program	mming Language	Sessional\n");			
🐏 file1.cpp		Batch Build			1	1					
		Configuration Mai	nager								
	۲	Compile	Ctrl+F7								
											-
and a second											
Code Definition Window											→ □ ×
No definition	sele	cted									×
•											
Code Definition Window	Outp	ut									

Keep Focus on output sub window after compiling the program:



To run your Application, On the debug menu click start without debugging:



Finally you get the following output message in a Command Prompt window :

