

# Procedural Programming Laboratory

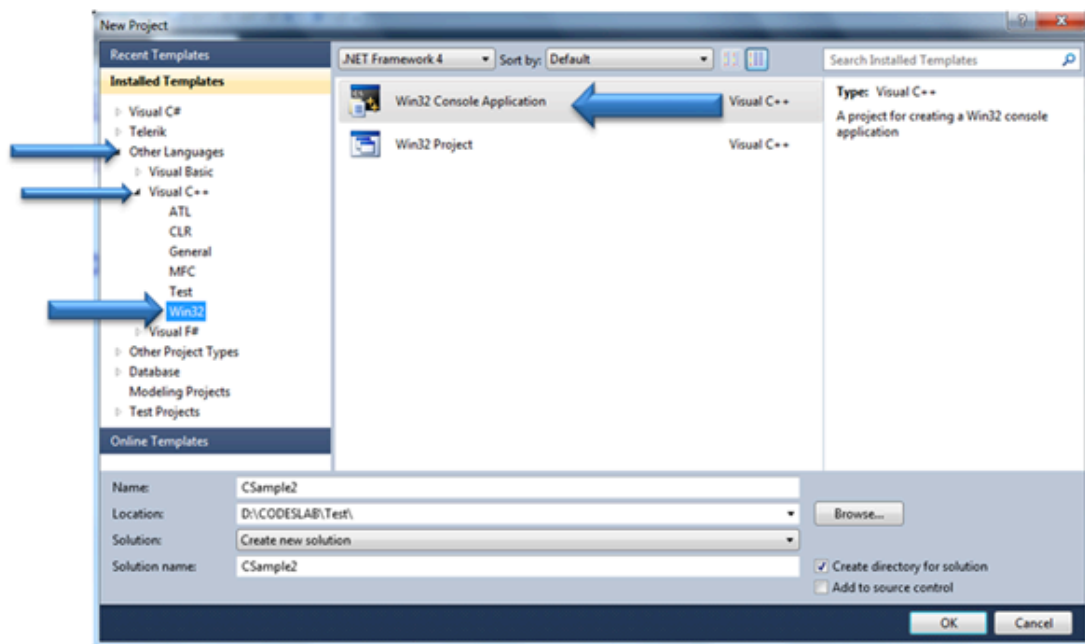
## Lab 1 Introduction to Microsoft Visual Studio

In this lab we are going to walkthrough writing C program in Visual Studio 2010.

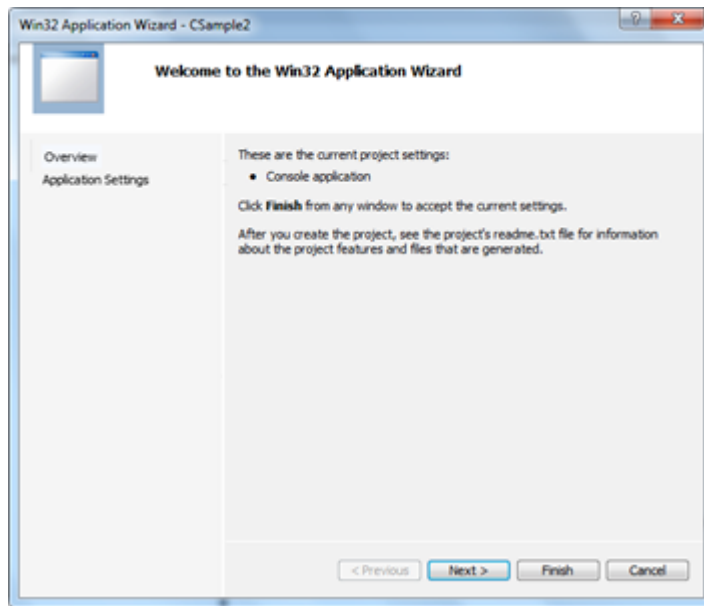
Follow the steps as below,

- Create a new project by clicking **File->New->Project**.
- From Installed Template choose **other language**
- Choose language **Visual C++**
- In Visual C++ choose tab **Win32**
- Choose project type **Win32 Console Application**

See the image below,

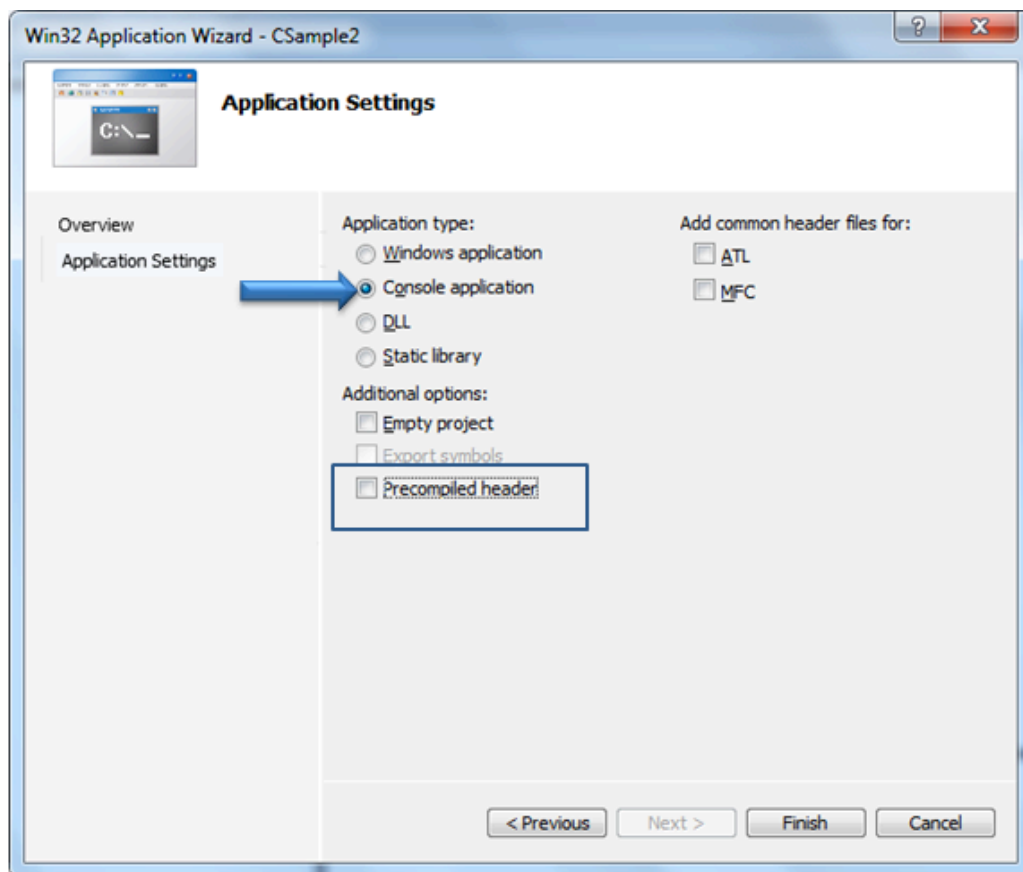


From the dialog box click on **Next** button



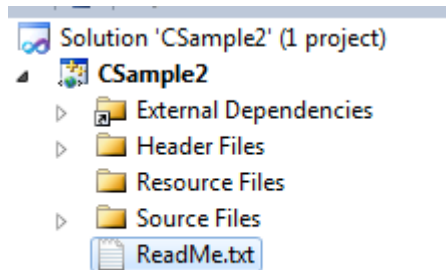
Next screen is of **Application Setting**. You need to make sure

- Application type is set a Console Application
- In Additional options **uncheck the Precompiled Header**.



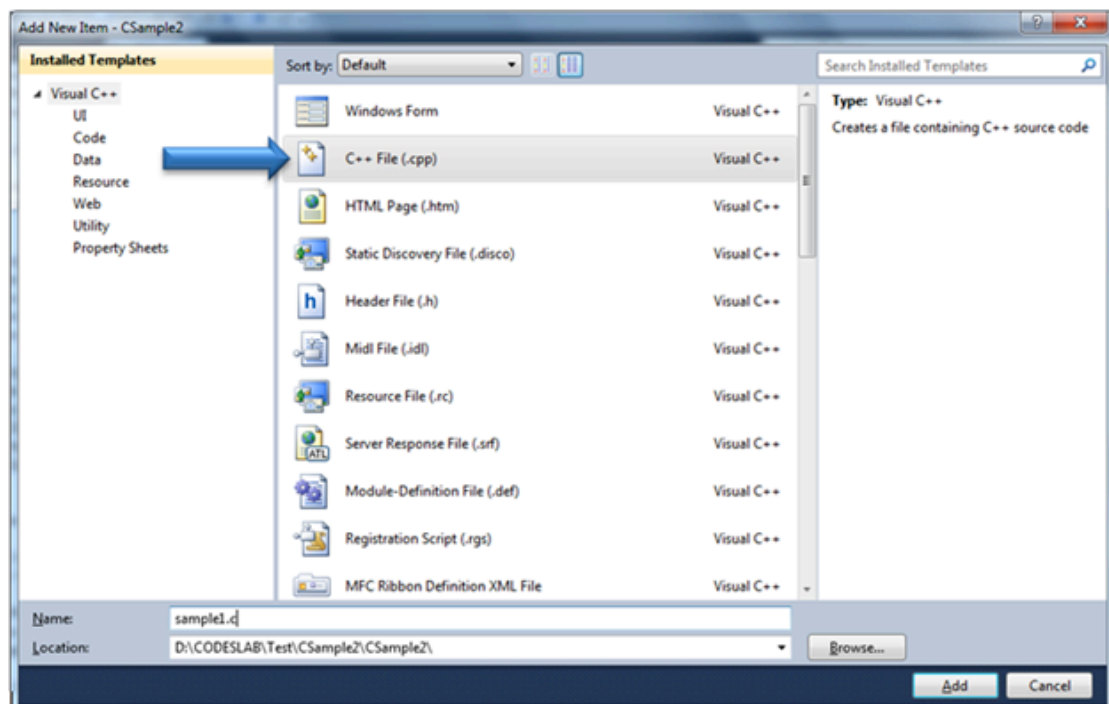
After clicking Finish you will find a project has been created with below structure.

Open solution explorer to see the structure



To start programming, right click on **Source Files** and **add a new item**. You need to make sure below two points,

- Select C++ File to add
- But in name change extension to **.C**, default is **.CPP**. To work with C language program source file name should be with extension **.C**. In this case I am giving source file name as **Sample1.C**

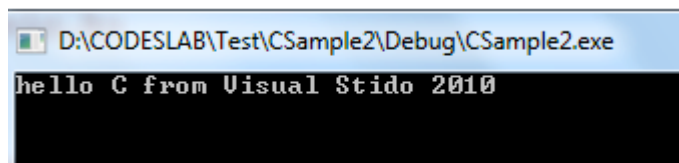


Now open Sample1.c and write a hello world program as below,

### Sample1.c

```
1
2     #include<stdio.h>
3     #include<conio.h>
4     void main()
5     {
6         printf("hello C from Visual Stido 2010");
7         getch();
8     }
```

To compile and run the program, simply press F5 and you should get output in console windows as below,



You can see that **CSample2.exe** is running and this is name of the project.

Next let us go ahead and write some code to print address of a variable using Pointer.

### Sample1.c

```
1
2     #include<stdio.h>
3     #include<conio.h>
4     void main()
5     {
6         int number1=9;
7         int *ptrNumber1;
8         printf("hello C from Visual Stido 2010\n");
9         ptrNumber1= &number1;
10        printf("%d\n",number1);
11        printf("%d\n",*ptrNumber1);
12        printf("%d\n",ptrNumber1);
13        printf("%d\n",&number1);
14        getch();
15    }
```

Above code is quiet simple,

- Declaring a pointer variable
- Declaring a pointer
- Assigning integer variable to pointer
- Printing values and address of integer variable