

## How to Run System Programming Code

### **Step 1: Download and Install Turbo C++**

Download and install Turbo C++ from either of these links. It will work on Windows 7, 8, 8.1, and 10 (both 32- and 64-bit versions supported):

<https://developerinsider.co/download-turbo-c-for-windows-7-8-8-1-and-windows-10-32-64-bit-full-screen/>

Or from the link:

<https://vulms.vu.edu.pk/Courses/CS609/Downloads/Turbo.C.3.2.zip>

### **Step 2: Download and Install NotePad++ (optional)**

Download NotePad++ from this link:

<https://notepad-plus-plus.org/downloads/>

**NOTE:** NotePad++ is not mandatory. You can use any text editor of your choice including Windows built-in Notepad.

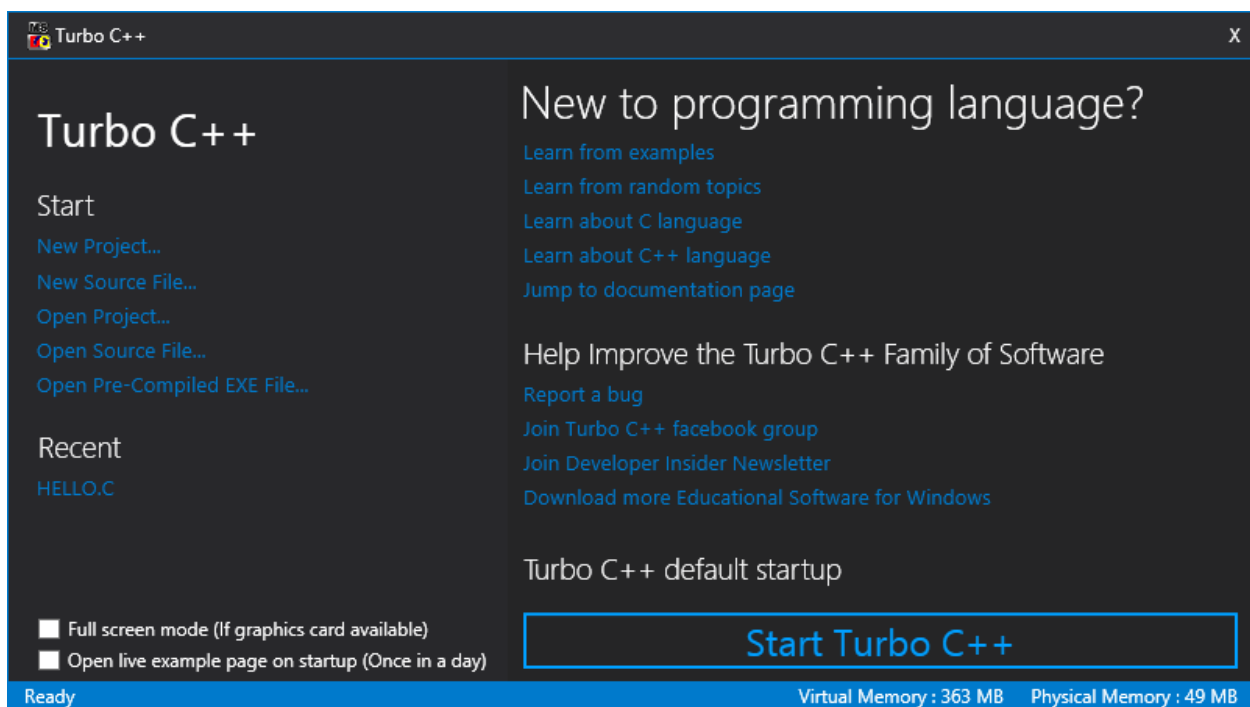
### **Step 3: Writing Code/Program**

- Open NotePad++. Go to Language tab and select C
- Write your code in the editor
- After writing, select File > Save As

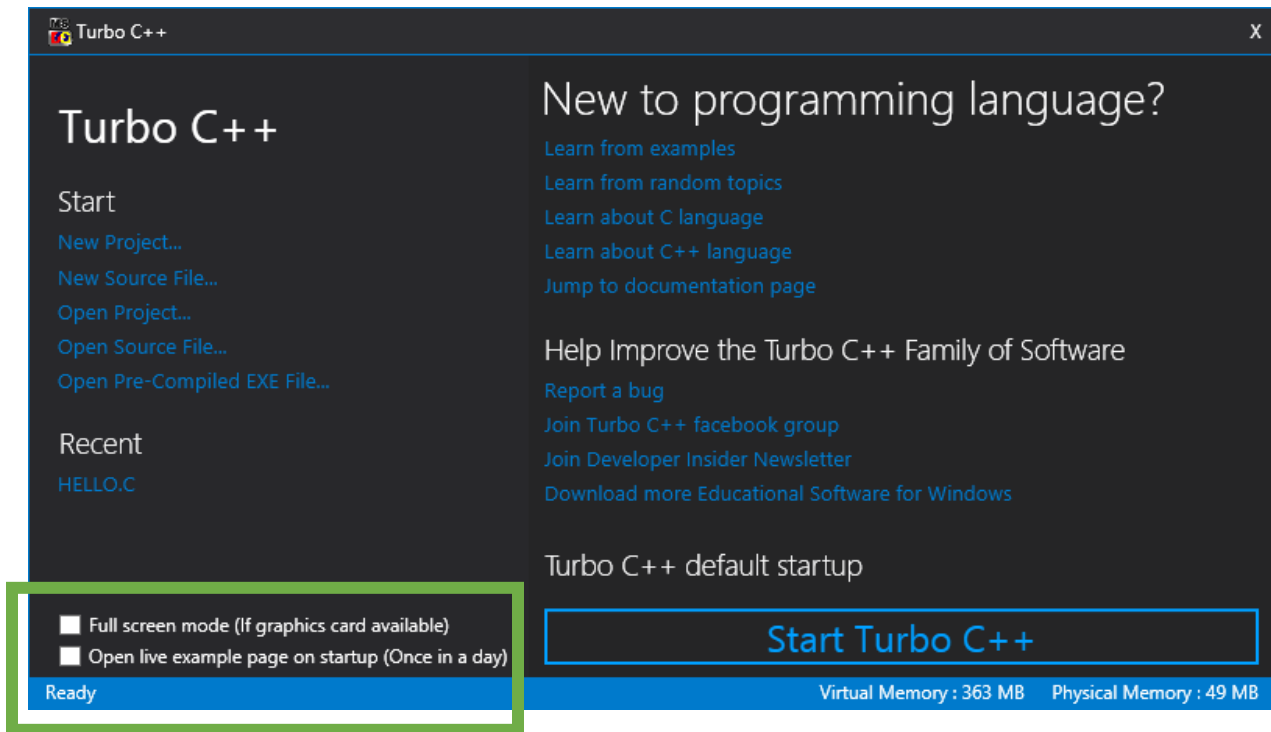
- When Save-As dialogue Box appears, select C drive > TURBOC3 > Projects. Give the desired name to the file and make sure you end the name with .C extension (The folder TURBOC3 and Projects will be automatically created after installation of Turbo C++)

#### Step 4: Compiling and Running Code in Turbo C++

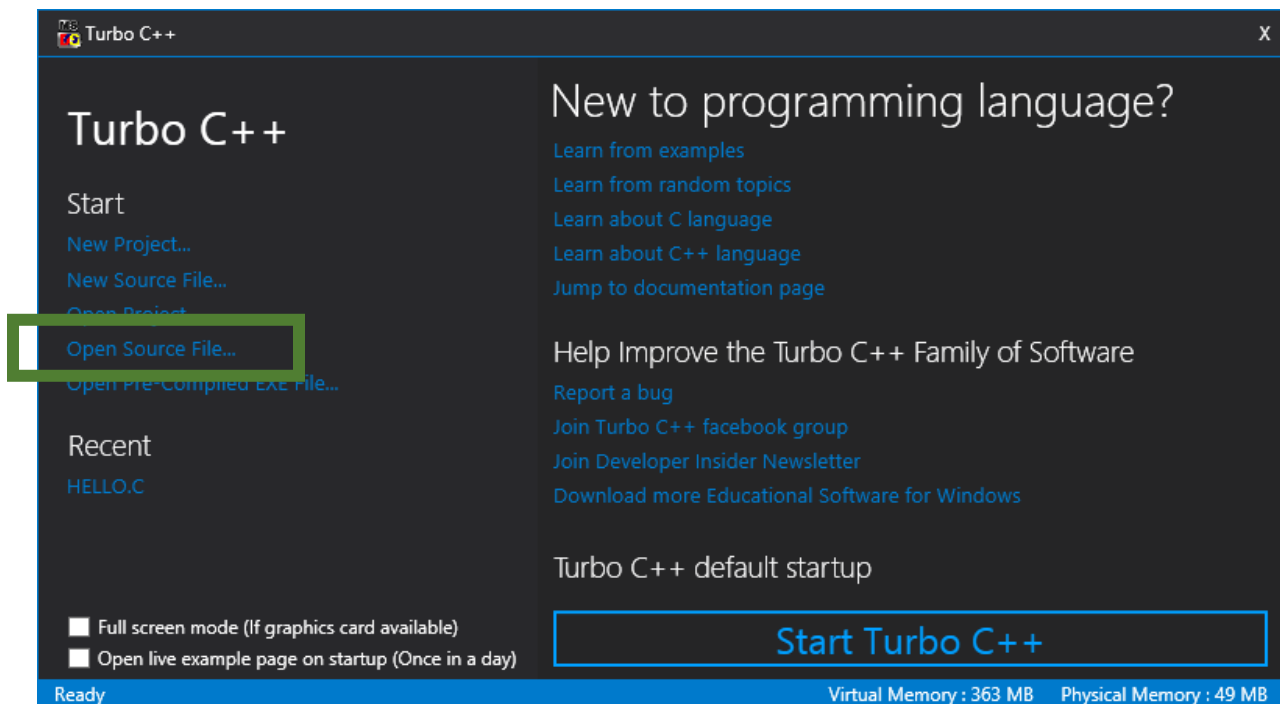
Open Turbo C++ by double clicking its icon on desktop. You will see the following screen:



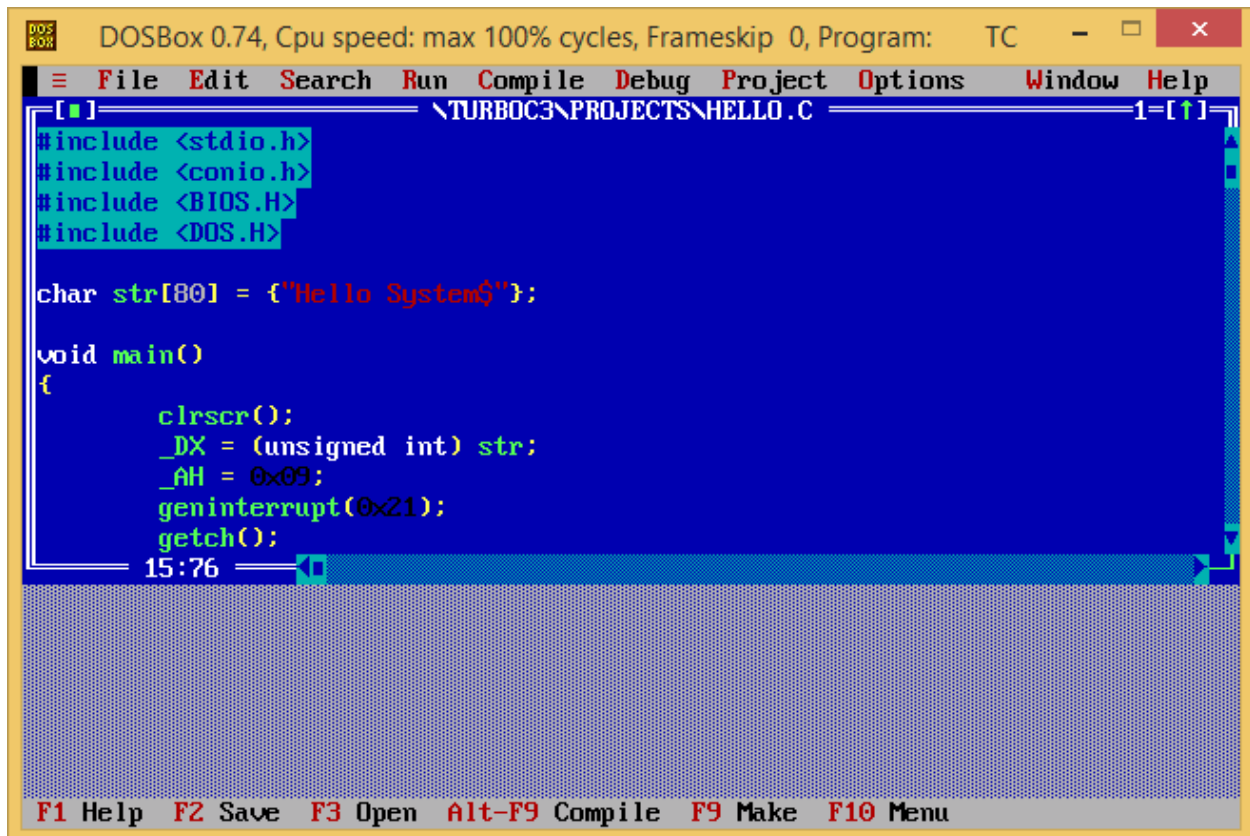
Make sure that the last two options are unchecked:



Now, select **Open Source File** and select your recently created C file (in Step 3) from Open Dialogue Box.



After this step, your program will be loaded in Turbo C++ as shown:



The screenshot shows the Turbo C++ IDE running within a DOSBox window. The window title is "DOSBox 0.74, Cpu speed: max 100% cycles, Frameskip 0, Program: TC". The IDE menu bar includes File, Edit, Search, Run, Compile, Debug, Project, Options, Window, and Help. The file name is "\TURBOC3\PROJECTS\HELLO.C". The code in the editor is as follows:

```
#include <stdio.h>
#include <conio.h>
#include <BIOS.H>
#include <DOS.H>

char str[80] = {"Hello System$"};

void main()
{
    clrscr();
    _DX = (unsigned int) str;
    _AH = 0x09;
    geninterrupt(0x21);
    getch();
}
```

The status bar at the bottom shows the time "15:76" and function key shortcuts: F1 Help, F2 Save, F3 Open, Alt-F9 Compile, F9 Make, F10 Menu.

To compile the program, select Compile tab > Compile. Or press ALT+F9 (If any error occurs during compilation, make changes by opening the program in NotePad++, save the file and the recompile it).

To run the program, select Run tab > Run. Or press CTRL+F9

To restore the mouse pointer back to Windows, press CTRL+F10

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