<Ex1>:

Objective: Write a program for "Hello World" and execute on EPB_C5515 target board

After reading this section you will be able to,

- Create new project for TMS320C5515 in Code Compose Studio V5.3 IDE
- Set-up supported JTAG for your DSP Kit and CCSv5.3
- Build/ Compile your project
- Run/Execute your project and observer the output
- Know hardware connection to the CPU
- Configure your system to get ready to work with EPB C5515

Hardware Part List:

- PC
- Code Composer Studio v5.3
- +5v DC Power supply
- EPB C5515
- Emulator + Emulator cable (USB A to Mini-A Cable, 14 pin FRC Flat cable)

Steps for creating new project:

Open CCS V5.3 from desktop shortcut



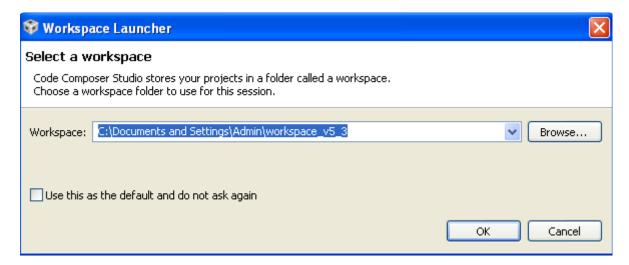
It will open default CCS V5 screen.



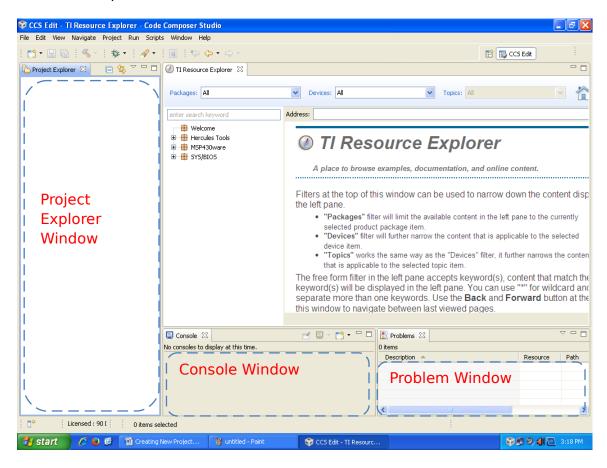
Then it will ask for workspace path

Select path "C:\Documents and Settings\<User Name>\workspace_v5_3" for windows XP OS

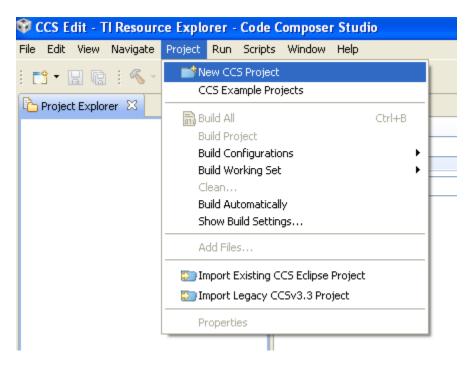
Select path "C:\Users\<User Name>\workspace v5 3" for windows7 OS



Then it will open Default CCS5 screen as shown below



Click "Project -> New CCS Project" menu.



It will open following screen

Project name as desired, - e.g "C5515 Hello World"

Output type: *Executable* as in figure.

And keep selected "use default location" so that project will be created in

workspace with project name typed

Select family: *C5500*,

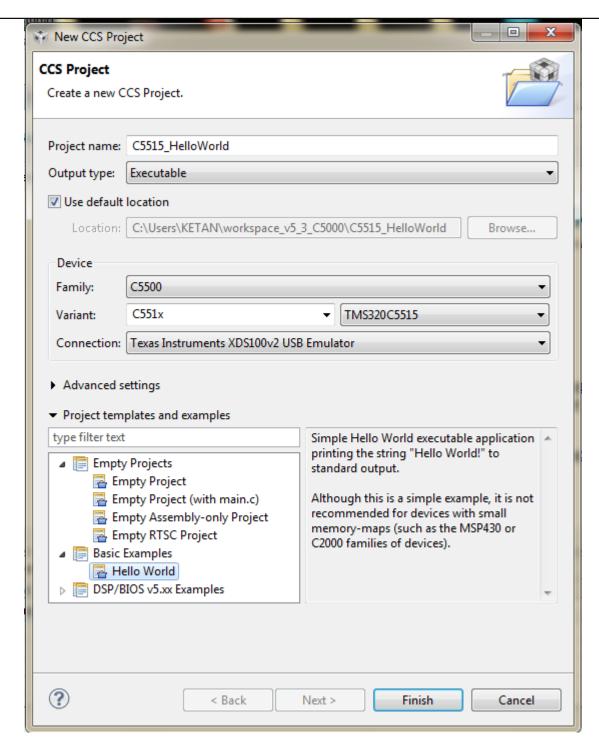
Variant: C551x

Processor: TMS320C5515

And use **connection** type as <u>Texas Instruments XDS100V2 USB Emulator</u>.

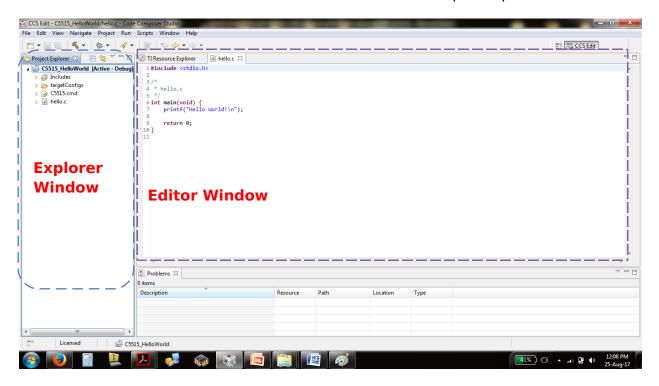
Then at last select "Hello World" example from "Basic Examples" location in

Project Templates and example tab. And Finish



It will open screen as shown here. Here project is already created and it can be seen from "project explorer"

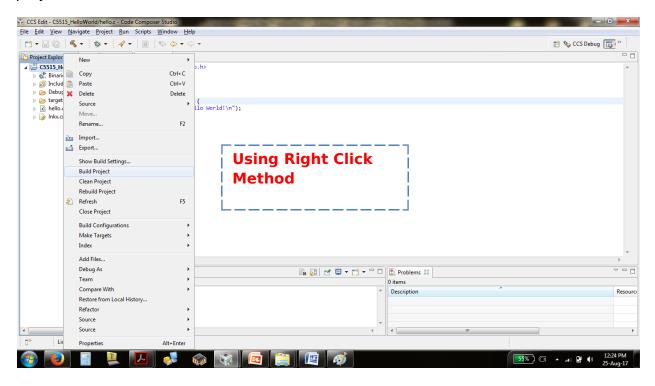
Editor window will show hello.c file which can be edited as per requirement.

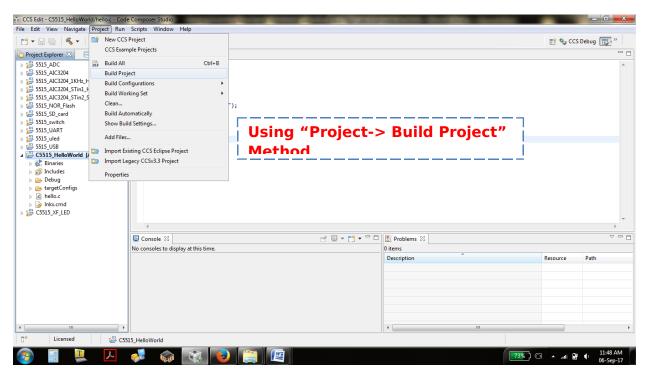


Delete **C5515.cmd** file from the project explorer and copy-paste **Inkx.cmd** file from the CD content given or reference example given.

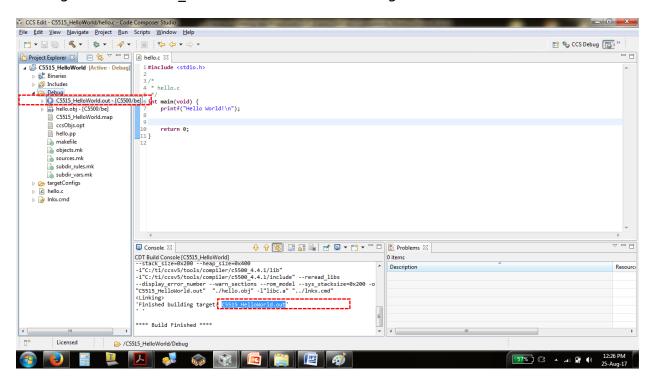
Steps to Build the project:

Compile the program by "right click-> build project" or "right click-> rebuild project" as shown.





It will generate C5515_HelloWorld.out file in "debug" folder.



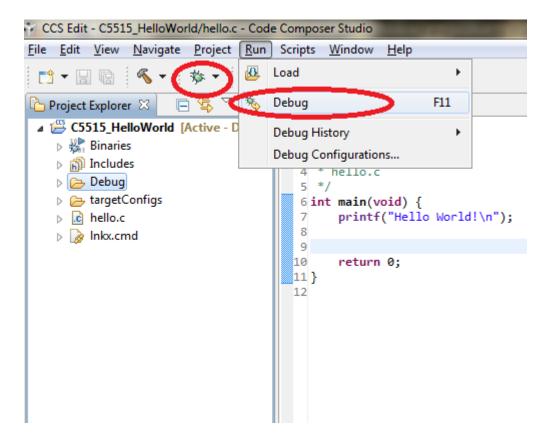
Steps to Run the project:

Steps for Hardware connection:

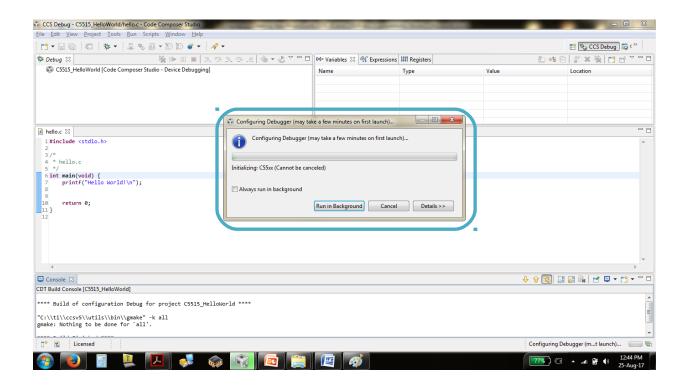
- Power on EPB_C5515 hardware using +5V Power supply or USB A-to-B cable
- Connect XDS100V2 with EPB C5515 using USB A-to-miniA cable with CPU
- Reset CPU

Steps to run/debug program:

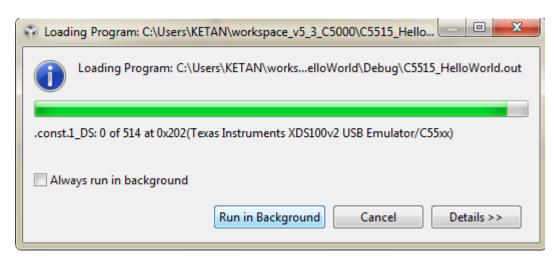
Now to debug the program click "**debug**" as shown in the screen from home screen icon **OR** from "**run->debug**" menu.



It will configure/connect EPB_C5515 kit with the CCSV5 using XDS100V2 and download the program in C5515 CPU. It will be done automatically.

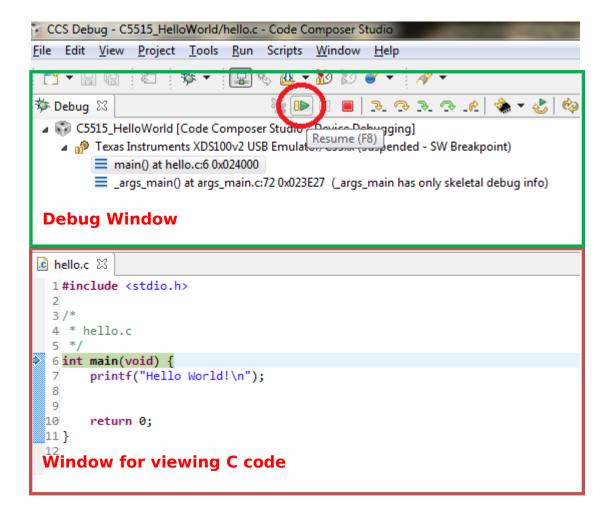


Once Configuration is over, it will start loading program into the CPU using JTAG emulator

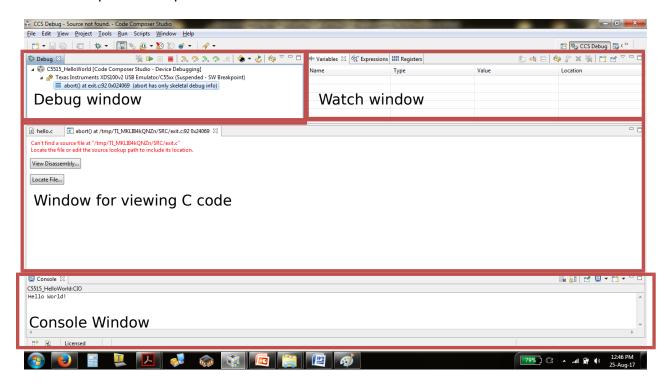


Time to Run/Execute the project:

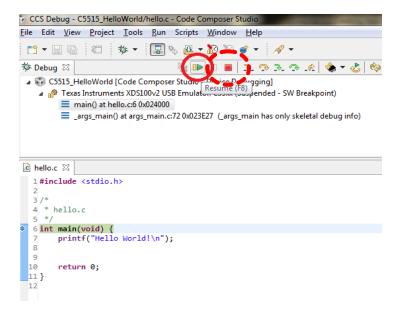
Once program is loaded click "resume". It will run/execute the program and give output on consol window



Check output on output consol window



To stop the project use Halt/Terminate as shown here in dotted red colored highlight and it stops the running program and closes the active project.



Enjoy...!