Task 1.1 – Construct-O-Bot

Welcome to **Task 1.1** of **Construct-O-Bot**!!

Please find the following folders within **Task 1.1** folder.

- ❖ First folder is *Assignment*

  - ➢ Please find the following files in this folder:

    - ● *Assignment Question.pdf*: Follow the instructions in this file to do the assignments on V-REP and Visual Studio IDE software.

    - ● *Assignment_e.ttt:* Use this file as instructed in *Assignment Question.pdf*

- ❖ Second folder is *Task*

  - ➢ Please find the following files in this folder:

    - ● *Problem Statement.pdf*: Follow the instructions in this file to do the task on V-REP and Visual Studio IDE software.

    - ● *CB_Task_1.1.ttt:* Use this file as instructed in *Problem Statement.pdf*

- ❖ Third folder is *Tutorial*

  - ➢ Go through *Modules for Robot.pdf* file to learn the basics components of a robot.

  - ➢ Go through *Predef.pdf* *to learn about predefined functions to be used in this task.*

Programming Instructions:

- ❖ Open Visual Studio and click on **Open the project or solution.**

- ❖ Browse to the folder CB Project located in Task 1 folder.

- ❖ Select *CB_Task_1_Project.sln* and Open it.

- ❖ You can start coding for Assignment and Task 1.1 under the particular function.

- ❖ You will make changes and further additions to your *CB_Task_1_Sandbox.cpp* and *CB_Task_1_Sandbox.h* file.

- ❖ You may declare new functions and global variables.

- ❖ You are NOT permitted to modify files apart from *CB_Task_1_Sandbox.cpp* and *CB_Task_1_Sandbox.h* file.

- ❖ The only exception to this is the *CB_Task_1.cpp* file which contains the main function.

❖ **In the main function, you are supposed to call only one function eg. Task_1_1 that will be called in main function. your entire problem statement Logic should be inside this Task_1_1 function located in *CB_Task_1_Sandbox.cpp*. You can call your defined function in Task_1_1 only.**

❖ During evaluation, any other modifications to your main function will NOT be considered.

Build and execute the code:

❖ Follow the steps as mentioned above in Programming Instructions.
❖ Click on Save before building the solution.
❖ Click on *Build -> Build Solution* or *(Ctrl+Shift+B)*: This will compile your code and report if there is any error.
❖ If no errors are found, your code is ready to link with V-REP (Make sure the correct V-REP scene is opened to simulate).
❖ Click on **Local Windows Debugger**, a pop-up window of Command Prompt will open and Type Y and Press **Enter .**
You can follow the instruction given in <u>tutorial</u> to understand the same in a better way.

Submission Instructions for Task 1.1:

You must submit your code for the task given in Task folder. Your submitted folder name should be ***CB#****_Task_1.1*** where ********** is your Team ID. For example, if the Team ID is 143, save it as, ***CB#0143_Task_1.1.zip*** and submit on the portal.

CB#****_Task_1.1.zip file should contain following files:
❖ *CB_Task_1_Sandbox.cpp*
❖ *CB_Task_1_Sandbox.h*
❖ *CB_Task_1.cpp*

NOTE: Deadline for Task 1.1 Submission is November 16th, 2019

All the Best!