

Instruction Manual - Participants

(For both C & C++ based coding assignments)

Steps to be executed

Step 1: View assignments

Step 2: Download project in the local machine

Step 3: Opening project in VSCode on local machine / desktop

Step 4: Test and validate the written code in Local machine

Step 5: Submit the written code in Edu Online

Step 1: View assignments

- Before proceeding, please ensure that the required tools (MinGW, Python, CxxTest, VSCode) are installed in your local machine. If it's done proceed with step 2.
- Student can go through course materials and then attempt the Assignments.
- Every assignment under assigned test will have two sections:
 - **Problem Statement-** Provides the details about the coding assignment.
 - **CPP-NOVA-Assignment-xx** - It Contains coding assignment in .Zip format.

Step 2: Download Assignment in the local machine

- Right-click on the specific assignment and click download. The assignment will be downloaded (.ZIP format) to your Local machine.
- Extract the Downloaded file. The Extracted folder contains three files:
 - **bitmap.h** : is the header file consists of prototype declarations of defined functions and necessary variables declaration.
 - **bitmap.cpp**: is the source file consists of function definitions with empty body. Participant is expected to write code for the specified functions in bitmap.cpp file.
 - **test.h** : consists of test cases that Participant use to validate and test the written code inside empty functions. The test cases and test data are

already given in this file that Participant can directly use to test the written code.

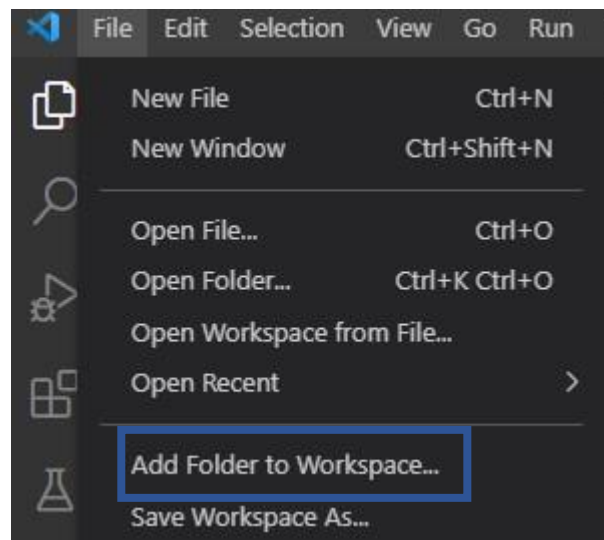
- **NOTE:**

- Participant need not to write main () function, cout and cin in bitmap.cpp file.
- Please do not delete or edit the file name/ folder name.
- Participants allowed to edit only in bitmap.cpp file

Step 3: Opening project in VSCode on local machine / desktop

After the Extracting project in the local machine, Participant need to open the Extracted folder in VSCode IDE.

click on "File >> "Add Folder to Workspace".



Step 4: Test and validate the written code in Local machine

Open the terminal in VSCode and type the following command:

Command 1 To create **test.cpp** file from the **test.h** file in the folder

```
C:/cxxtest-4.4/bin/cxxtestgen --error-printer test.h -o test.cpp
```

Command 2 To create the executable file, that is, **runner.exe**.

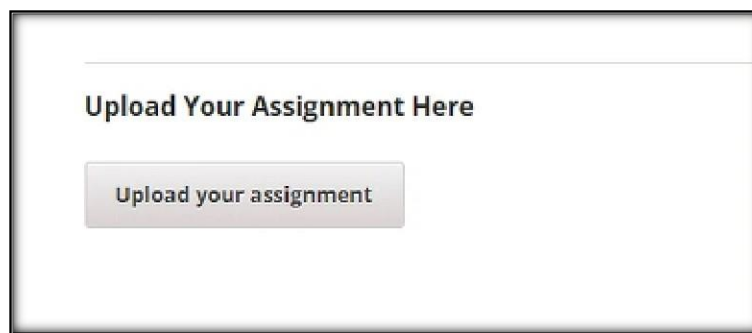
```
g++ bitmap.cpp test.cpp -o runner.exe
```

Command 3 To view test report in Local Machine

```
./runner.exe
```

Step 5: Submit the written code in Edu Online.

- Upon successful validation of the written code, the folder must be zipped (in .ZIP file format only) and then submit by clicking the “Upload your assignment tab” as shown in below image.



- VVIMP :**
 - If you submit the files in any other format than .ZIP, the system may accept it, but will not evaluate it.
 - Once wrong format or wrong code is submitted, there will not be no second opportunity to re-upload it, so please check your code multiple times, get clarity from NOVA team (novasupport@kpit.com) if you are not sure about submission.