1.5 Scope

This section will guide you to:

* Create and run TypeScript code in your terminal
* Declare variables in TypeScript

This lab has two subsections, namely:

1.5.1 Writing a TypeScript program that declares variables using let

1.5.2 Executing the program and verifying how scope works

**Step 1.5.1:** Writing a TypeScript program that declares variables using let

Open your code editor and create a new file to type the code in

* *[Right click]* on the **File menu** of the code editor -> Select *New File*
* Enter the below code resolving the warning and errors due to compatibility-related issues
* *[Right click]* on the **File menu** of the code editor -> Select *Save as* -> Enter the filename (with**.ts** file extension) -> Click *Save*

let a: number = 10;

console.log('before the block a =', a);

if(1)

{

let a: number = 555;

console.log('inside the block a =', a);

}

console.log('after the block a =', a);

**Step 1.5.2:**  Executing the program and verifying how scope works

If TypeScript is not already installed, you’ll need to install it by running the command, ***npm install –g typescript*** from the terminal. Before you execute the program, check for syntactical corrections. If no errors are found, follow the steps mentioned below:

* Open the terminal
* Navigate to the directory where the code is stored
* Type the command *tsc [fileName.ts]* and press Enter
* The code will compile
* Type the command node [fileName.js] and press Enter
* The code will produce the following output

