1.2 Arrays

This section will guide you to:

* Create and run TypeScript code in your terminal
* Define arrays of different data types in TypeScript

This lab has two subsections, namely:

1.2.1 Writing a TypeScript program that works with arrays

1.2.2 Executing the program and verifying how arrays work

**Step 1.2.1:** Writing a TypeScript program that works with arrays

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*

const n: number[] = [10, 20, 30];

console.log('n =', n);

const x: Array<string> = new Array<string>('Jane', 'Dana, 'Judy');

console.log('x =', x);

let customer: [number, string] = [10, 'Jane'];

console.log('customer:', customer);

customer[0] = 20;

customer[1] = 'Dana';

console.log('customer:', customer);

**Step 1.2.2:**  Executing the program and verifying how arrays work

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

