1.8 Rest Parameters

This section will guide you to:

* Create and run TypeScript code in your terminal
* Define functions with rest parameters in TypeScript

This lab has two subsections, namely:

1.8.1 Writing a TypeScript program that defines functions with rest parameters in TypeScript

1.8.2 Executing the program and verifying how rest parameters work

**Step 1.8.1:** Writing a TypeScript program that defines functions with rest params in TypeScript

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 sum = (...n: number[]): number => {

let result = 0;

for (let i = 0; i < n.length; i++) {

result += n[i];

}

return result;

};

let c: number = sum(10, 20);

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

c = sum(20, 30, 40, 50, 60);

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

c = sum(20, 30, 40, 50, 60, 10, 10, 10, 10);

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

**Step 1.8.2:**  Executing the program and verifying how rest parameters 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

