1.4 Inheritance and Constructors

This section will guide you to:

* Implement inheritance
* Use Visual Studio Code
* Push code to Git

This lab has three subsections, namely:

* + 1. Writing a function in TypeScript to implement inheritance
    2. Compiling the code
    3. Pushing the codes to your GitHub repositories

**Step 1.4.1:** Writing a function in TypeScript to implement inheritance

* Open Visual Studio Code, open a folder named **TypeScript Demos** and create a new file named **main.ts**.
* Write the program in TypeScript.

*let array = [1, 2, 3, 5, 2, 8, 9, 2];*

*class Count {*

*count(){*

*console.log(array.filter(x => x === 2).length);*

*}*

*}*

*class Sum extends Count {*

*sum(){*

*let sum=0;*

*for(var i=0; i<array.length;i++){*

*sum = sum + array[i];*

*}*

*console.log(sum);*

*}*

*}*

**Step 1.4.2:** Compiling the code

* To compile the code, you can open the Integrated Terminal (Ctrl+`) and type the following:

*tsc main.ts*

* This will compile and create a new main.js JavaScript file.
* Run the following command:

node main.js

Output:

*3*

*32*

**Step 1.4.3:** Pushing the codes to your GitHub repositories

Open your command prompt and navigate to the folder where you have created your files.

cd <folder path>

Initialize your repository using the following command:

git init

Add all the files to your git repository using the following command:

git add . 

Commit the changes using the following command:

git commit . -m “Changes have been committed.”

Push the files to the folder you initially created using the following command:

git push -u origin master