

# TypeScript Crash-course

## Installing TypeScript

You can install the TypeScript compiler with node:

```
1 | npm i typescript -g
```

Then to verify that it is installed, run `tsc -v` to see the version of the compiler. You will get an output like this:

```
message TS6029: Version 1.7.5
```

In addition to the compiler, we also need to install the TypeScript Definition manager for DefinitelyTyped (tsd). You can install tsd with:

```
1 | npm i tsd -g
```

Using TSD, you can search and install TypeScript definition files directly from the community driven DefinitelyTyped repository. To verify that tsd is installed, run tsd with the `version` flag:

```
1 | tsd --version
```

You should get an output like this:

```
>> tsd 0.6.5
```

After `tsd` and `tsc` are installed, we can compile a hello world program:

make a file called `hello.ts` on your desktop:

```
1 touch ~/Desktop/hello.ts
```

Then, put some TypeScript code in the file:

```
1 echo "const adder = (a: number, b: number): number => a + b;" > ~/De
```

A terminal window with a light gray background. The command `echo "const adder = (a: number, b: number): number => a + b;" > ~/De` is entered on the first line. The output of the command is visible on the line below, but it is partially cut off by the right edge of the image. The terminal has a standard macOS-style title bar and a scrollbar on the right.

Then you can compile the file to JavaScript:

```
1 tsc ~/Desktop/hello.ts
```

It should output a file in `Desktop/hello.js` :

```
1 var adder = function (a, b) { return a + b; };
```

Now that your TypeScript compiler setup, we can move on to configuring Visual Studio Code.