# Installation

1. Download and install Node.js. Link : <https://nodejs.org/en/download/> , windows installer
2. Open a Windows command prompt and run:

npm install -g typescript

# Compile the typescript

Navigate to the directory where your typescript file is in, and type:

tsc yourtypescriptfile.ts

This will compile the typescript to javascript and will generate a .js file.

# Function declaration

outside a classs

Eg:

function add(a: number, b: number): number{

return a+b;

}

Function declaration inside a class:

Eg:

add(a: number, b: number): number{

return a+b;

}

# Function overloading

//Function over loading

add**(**a**:** string**,** b**:** string**):** number**;**

add**(**a**:** number**,** b**:** number**):** number**;**

//function with args and return type, declared.

add**(**a**,** b**):** number**{**

**if(typeof** a **==** 'string'**){**

a**=** **parseInt(**a**,** 10**);**

**}**

**if(typeof** b **==** 'string'**){**

b**=** **parseInt(**b**,** 10**);**

**}**

**return** a**+**b**;**

**}**

First we declare the add functions with the argument types. Next we define the add function and its body.

Types: any, number, string, Boolean, enum

Superset of javascript

Compiles to javascript

Eg showing type

