**Day 1**

TypeScript is a type of scripting language provided by micro soft. Typescript known as super set of JavaScript which support all features of ES6.

Java Script doesn’t support static data types concept.

ES5

var n; undefined

var a=10; number type consider

a=”Ravi”; string type consider

a=true;

a=new Date();

ES6

function add(a,b) {

console.log(a+” ”+b);

}

add(10,20);

add(“A”,”B”);

add(100);

add();

function sayHello() {

this can return any type of value as well as no return type.

}

TypeScript support data type at compile time or static data type declaration.

Still all browser doesn’t support typescript. We need to convert TS to JS ie Transpiler (compiler).

TS file we use in developer mode.

Using npm we need to download Typescript compiler or transpiler

npm install -g typescript

tsc welcome.ts this command convert ts file to js

node welcome.js using this command run the program

Typescript support all type of data types.

Like

number,

string

boolean

object

any

array : In JS array is use to store any type of values.

var arrayName:datatype[];

var, let and const

var is use to declare global scope.

Let is use to declare block scope.

Using var keyword we can re-declare same variable once again with same or different value.

But using let we can’t re-declare same variable once again.

const is use to declare constant value we can’t change that value.

Command to convert TS to JS version ES6

tsc --target es6 varletconst.ts

tsconfig.json

TypeScript functions

Function with default value (set default value), optional parameter( use ?) , rest operator or parameter and spread parameter.

Rest parameter syntax

…varaibleName:Array<DataType> it can receive 0 or 1 or many. In one function it must last parameter and only one rest parameter we can use inside one function.

Normal function : this function we can call before function declaration as well as after function declaration. It support js hosting features.

Expression style function : this type of function must be invoke after declaration. It doesn’t support js hosting features.

Arrow style function

Callback function : passing the function as parameter or function itself to another function as parameter is known as callback function.

IIFE function (Immediate Invoke function execution/expression)

(functionBody)(functonCall)