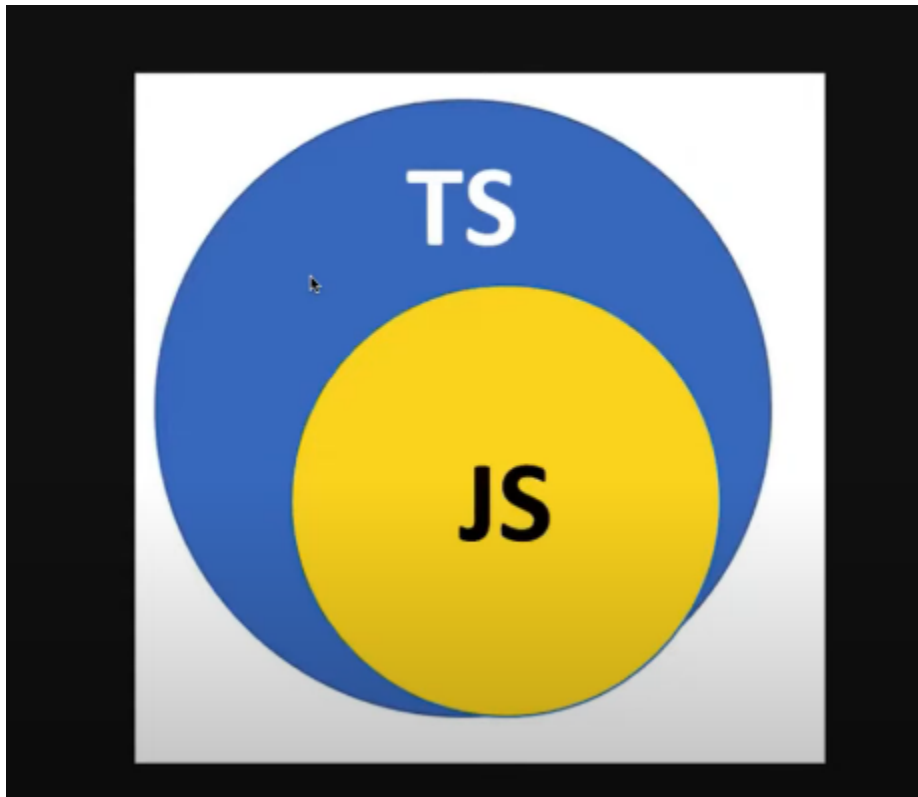Super set of js.

Problem with js -
Run time language.
When we run then we know error.

Ts-
Compile time language like java. At compile time we get the errors.

Check ts is available or not-

```
C:\Users\karan>tsc -v
'tsc' is not recognized as an internal or external command,
operable program or batch file.
```

When ts is not present-

```
C:\Users\karan>tsc -v
'tsc' is not recognized as an internal or external command,
operable program or batch file.
```

Check node version-

```
C:\Users\karan>node -v
v18.20.8

C:\Users\karan>npm -v
10.8.2

C:\Users\karan>
```

Different ways to check version-

```
C:\Users\karan>tsc -v
Version 5.8.3

C:\Users\karan>node -v
v18.20.8

C:\Users\karan>npm -v
10.8.2

C:\Users\karan>tsc --version
Version 5.8.3

C:\Users\karan>node --version
v18.20.8

C:\Users\karan>npm --version
10.8.2

C:\Users\karan>
```
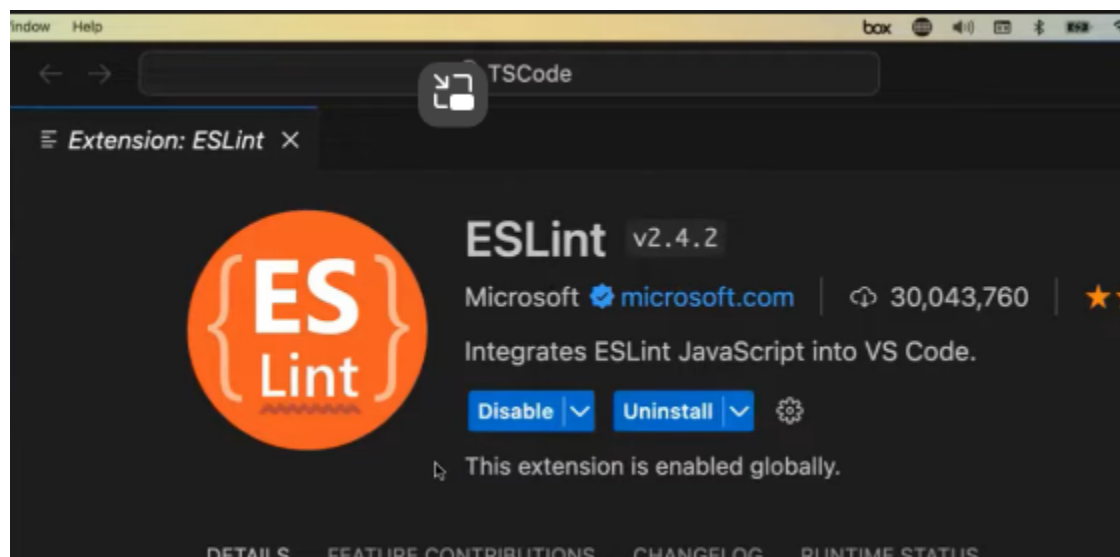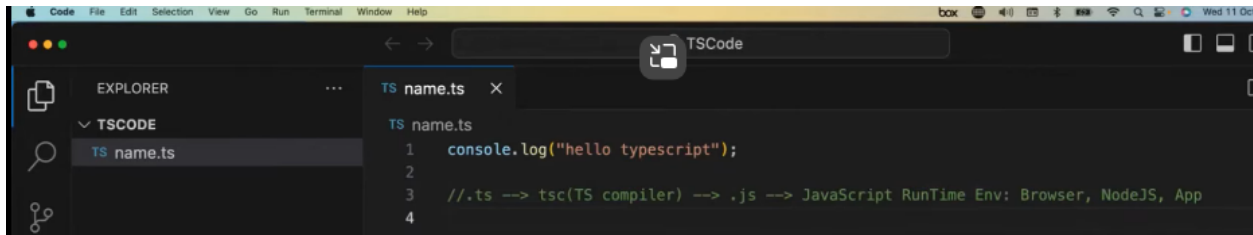
Install ts-

```
C:\Users\karan>cd C:\Users\karan\Desktop\tsNaveen

C:\Users\karan\Desktop\tsNaveen>npm install -g typescript

added 1 package in 3s

C:\Users\karan\Desktop\tsNaveen>
```

```
C:\Users\karan\Desktop\tsNaveen>tsc -v
Version 5.8.3

C:\Users\karan\Desktop\tsNaveen>
```
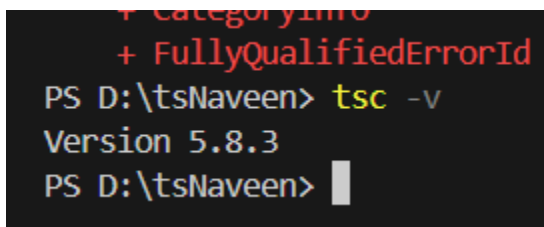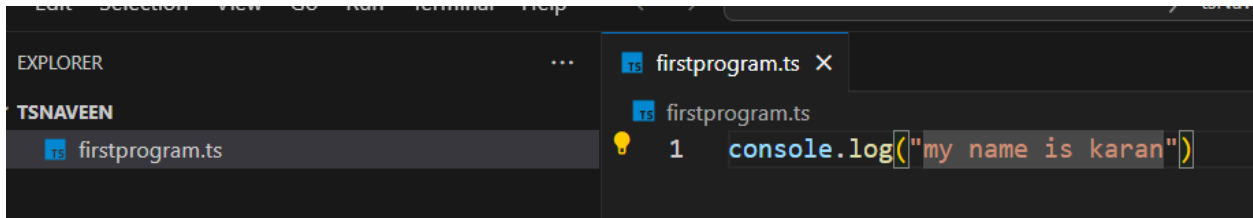
Eslint extension-

How ts works–

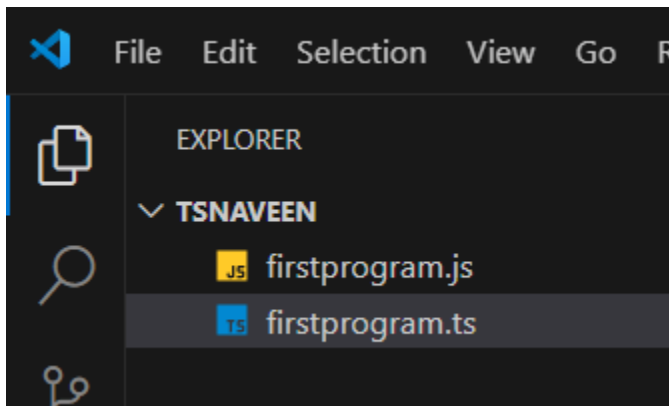First code-


```
+ categoryInfo
    + FullyQualifiedErrorId
PS D:\tsNaveen> tsc -v
Version 5.8.3
PS D:\tsNaveen>
```

Compile and js file will be created-

```
Version 5.8.3
PS D:\tsNaveen> tsc .\firstprogram.ts
PS D:\tsNaveen>
```


Run the js

```
PS D:\tsNaveen>
PS D:\tsNaveen>
PS D:\tsNaveen>
PS D:\tsNaveen> node .\firstprogram.js
my name is karan
PS D:\tsNaveen>
```

Give data type when declaring-

```
TS givedatatype.ts X

TS givedatatype.ts > ...
  1    let age:number=30
  2    var firstName:string="karan"
  3    const isActive:boolean=true
  4
  5    console.log(age)
  6    console.log(firstName)
  7    console.log(isActive)
```

```
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINA

PS D:\tsNaveen> tsc .\givedatatype.ts
PS D:\tsNaveen> node .\givedatatype.js
30
karan
true
PS D:\tsNaveen>
```