



Data Types In TypeScript **by Kunal Sir**

❖ **Typescript datatype:-**

TypeScript is statically type object oriented programming language. it means, the data members should have their fixed datatype.

Datatype defines witch kind of value is going to be store inside the variable.

All tho TypeScript will not force to define datatype , but it is not good practice to declare variables (data members) without defining their types.

Below are the some primitive data-types in typescript.

Sr. No.	Datatype	Description
1	number	The number datatype can store both integral as well as decimal values.
2	string	The string datatype store the text , in typescript We can define string value using “ “ or ‘ ‘ If it is needed to store character value then also we need to using string datatype as char data type is not available in typescript.
3	boolean	The boolean datatype can store one of the two values either true or false.
4	any	Once the variable is define with any datatype then then that veritable can store



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Data	Types	In TypeScript
		any value. Whenever we are getting value from end user and we are not aware with kind of value that user is going to pass at that time we use any datatype.

Below is the program to declare data members in typescript , and to describe how to print their values inside html. In typescript How to declare variables and their types:

```
src > app > app.component.ts > AppComponent > remark
1  import { Component } from '@angular/core';
2
3  @Component({
4    selector: 'app-root',
5    templateUrl: './app.component.html',
6    styleUrls: ['./app.component.css']
7  })
8  export class AppComponent {
9
10     studentRollNo:number=1;
11     studentName:string='xyz';
12     studentDivision:string='B';
13     studentMarks:number=78.99;
14     isApplicable:boolean=true;
15     remark:any='We can pass any kind of remark';
16
17 }
18
```



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1. How to print values of those variables in html.

```
app.component.ts M  app.component.html M X
src > app > app.component.html > p > b
Go to component
1
2 <h1>Studnet Rollno:- {{studentRollNo}}</h1>
3 <h1>Studnet Name:- {{studentName}}</h1>
4 <h1>Studnet Division:- {{studentDivision}}</h1>
5 <h1>Studnet Marks:- {{studentMarks}}</h1>
6 <h1>Applicable To Promote:- {{isApplicable}}</h1>
7 <p><b>Remark:- {{remark}}</b></p>
8
```

❖ Non-primitive datatype:

In typescript object and arrays are the non-primitive data types.

➤ **Array:-** Array represents sequence of elements in single entity.

We can define array using two ways.

- a. Using array symbol ' [] '
- b. Using Array class.



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Data Types In TypeScript
Below example justify both ways.

1. Declaration of array.

```
app.component.ts M x app.component.html M
src > app > app.component.ts > AppComponent > names
1  import { Component } from '@angular/core';
2
3  @Component({
4    selector: 'app-root',
5    templateUrl: './app.component.html',
6    styleUrls: ['./app.component.css']
7  })
8  export class AppComponent {
9    //using array symbol
10   names:string[]=['abc','pqr','xyz','mno'];
11
12   //Using Array class
13   days=new Array<string>('SUN','MON','TUE','WED','THU','FRI','SAT');
14
15
16
17 }
18
```

2. How Iterate arrays in html and print that values.

```
src > app > app.component.html > ...
Go to component
1  <p><b>Below are the names of students:-</b></p>
2  <div *ngFor="let name of names">
3    {{name}}
4  </div>
5  <pre></pre>
6
7
8  <p><b>Below are the days in the week:-</b></p>
9  <div *ngFor="let day of days">
10   {{day}}
11 </div>
12
```



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Output:-



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➤ Object:-

In order to create objects in TypeScript we should create our own non-primitive data type that is nothing but custom class.

1. Using below command to create a class

ng g class model/User

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
● PS E:\Angular Workspace\MyDataTypeApp> ng g class model/User
  CREATE src/app/model/user.spec.ts (146 bytes)
  CREATE src/app/model/user.ts (22 bytes)
○ PS E:\Angular Workspace\MyDataTypeApp> 
```

2. Declare data members in side this class

```
TS user.ts U X
src > app > model > TS user.ts > User > mobileNo
1  export class User {
2
3      userId:number;
4      userName:string;
5      userEmail:string;
6      ⚡ mobileNo:number;
7
8  }
9
```



Data Types In TypeScript

```
src > app > app.component.ts > AppComponent
E:\Angular Workspace\MyDataTypeApp\src\app\model\user.ts
4 @Component({
5   selector: 'app-root',
6   templateUrl: './app.component.html',
7   styleUrls: ['./app.component.css']
8 })
9 export class AppComponent {
10
11   user:User={
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```
<h1>User Info:-</h1>
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username:- {{user.userName}}<br>
user email:- {{user.userEmail}}<br>
Mobile no:- {{user.mobileNo}}
```



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OutPut:-

