

src\inheritance.ts

```
1 // *****
2 /** Inheritance in TS
3 // *****
4
5 /** Inheritance allows a class to reuse the functionality of an existing class without
6 rewriting it.
7
8 /** Inheritance is a mechanism in which one class acquires the property of another
9 class. For example, a child inherits the traits of his/her parents.
10
11 class Persons {
12     name: string;
13     age: number;
14     hobbies: string[];
15
16     constructor(name: string, age: number, hobbies: string[]) {
17         this.name = name;
18         this.age = age;
19         this.hobbies = hobbies;
20     }
21
22     introduce(): string {
23         return `Hi, I'm ${this.name} and I'm ${
24             this.age
25         } years old. I love ${this.hobbies.join(",")}.`;
26     }
27 }
28
29 class Students extends Persons {
30     grade: number;
31     constructor(name: string, age: number, hobbies: string[], grade: number) {
32         super(name, age, hobbies);
33         this.grade = grade;
34     }
35
36     introduce(): string {
37         return `${super.introduce()} .I am in grade ${this.grade}`;
38     }
39 }
40
41 const persons1: Persons = new Persons("vinod", 12, ["reading", "painting"]);
42 const persons2: Persons = new Persons("thapa", 15, ["coding", "sports"]);
43 const students1: Persons = new Students(
44     "bahadur",
45     25,
46     ["coding", "sports"],
47     10
48 );
49
50 console.log(students1.introduce());
```