

EXP-3.3:

AIM:

Create a base Person class that has properties like name and age, and a method to display basic information. Then, create two subclasses: Student and Teacher, each extending Person. The Student class should include an additional property like grade or course, and the Teacher class should include a property like subject or department. Each subclass should override or extend methods as needed to display complete details. Finally, create instances of both subclasses and demonstrate calling their methods to show how inheritance and method overriding work

CODE-

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1" />
  <title>Person Class Hierarchy Demo</title>
  <style>
    body {
      background: #f1f4fa;
      font-family: 'Segoe UI', Arial, sans-serif;
    }

    .container {
      max-width: 420px;
      margin: 40px auto;
      background: #fff;
      padding: 32px;
      border-radius: 10px;
      box-shadow: 0 4px 18px rgba(0, 0, 0, 0.08);
    }
  </style>
</head>
<body>
  <div class="container">
    <h1>Person Class Hierarchy Demo</h1>
  </div>
</body>
</html>
```

```
}
```

```
h2 {  
  text-align: center;  
  margin-bottom: 28px;  
  color: #266ac3;  
}
```

```
.button-group {  
  display: flex;  
  justify-content: center;  
  gap: 15px;  
  margin-bottom: 22px;  
}
```

```
.button-group button {  
  padding: 10px 26px;  
  background: #266ac3;  
  color: #fff;  
  border: none;  
  border-radius: 6px;  
  cursor: pointer;  
  font-size: 16px;  
  transition: background 0.18s;  
}
```

```
.button-group button:hover {  
  background: #133a72;  
}
```

```
.info-box {  
  background: #e9f1fe;  
  color: #19325c;  
  text-align: center;
```

```
    border-radius: 7px;
    min-height: 42px;
    padding: 13px;
    font-size: 17px;
    box-shadow: 0 2px 6px rgba(38, 106, 195, 0.08);
  }
</style>
</head>
<body>
  <div class="container">
    <h2>Person Class Hierarchy (ES6 Classes)</h2>
    <div class="button-group">
      <button id="studentBtn">Show Student Info</button>
      <button id="teacherBtn">Show Teacher Info</button>
      <button id="personBtn">Show Person Info</button>
    </div>
    <div id="infoBox" class="info-box"></div>
  </div>

  <script>
    class Person {
      constructor(name, age) {
        this.name = name;
        this.age = age;
      }
      displayInfo() {
        return `Name: ${this.name}, Age: ${this.age}`;
      }
    }

    class Student extends Person {
      constructor(name, age, grade) {
        super(name, age);
        this.grade = grade;
      }
    }
  </script>
</body>
</html>
```

```
displayInfo() {  
    return `Name: ${this.name}, Age: ${this.age}, Grade: ${this.grade}`;  
}  
}
```

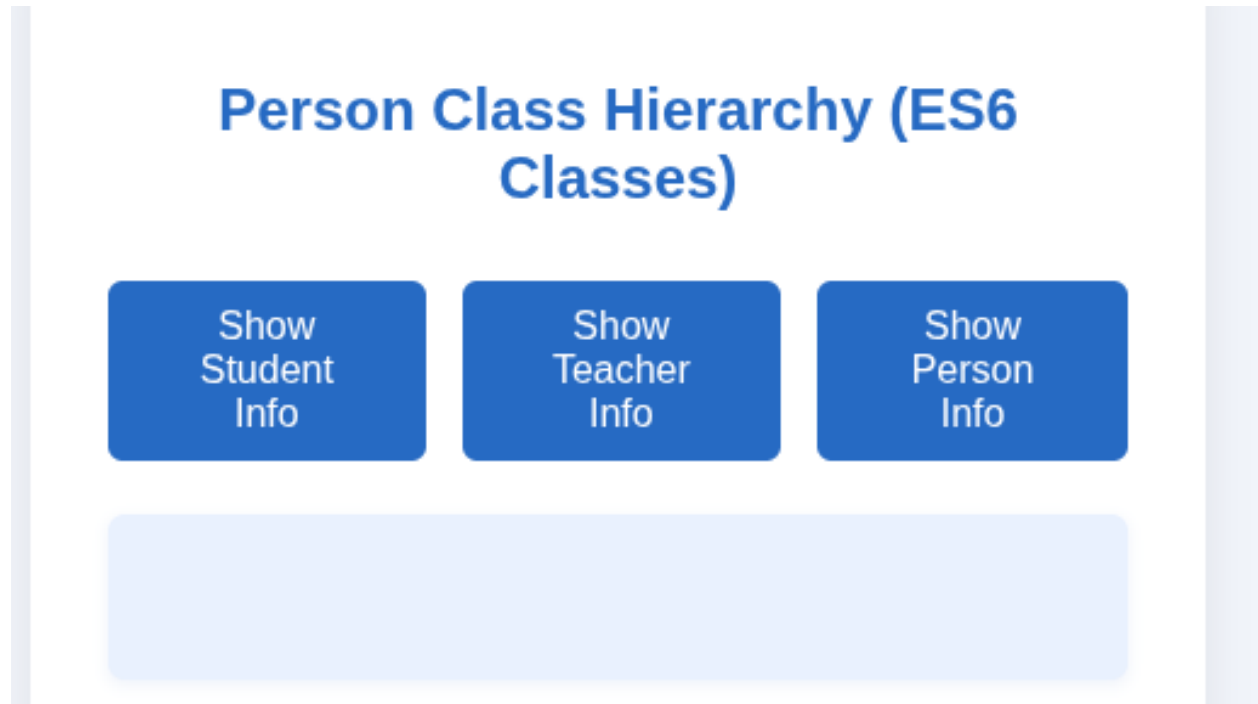
```
class Teacher extends Person {  
    constructor(name, age, subject) {  
        super(name, age);  
        this.subject = subject;  
    }  
    displayInfo() {  
        return `Name: ${this.name}, Age: ${this.age}, Subject: ${this.subject}`;  
    }  
}
```

```
const student1 = new Student("Alice", 20, "Mathematics");  
const teacher1 = new Teacher("Mr. Smith", 45, "Physics");  
const person1 = new Person("Bob", 30);
```

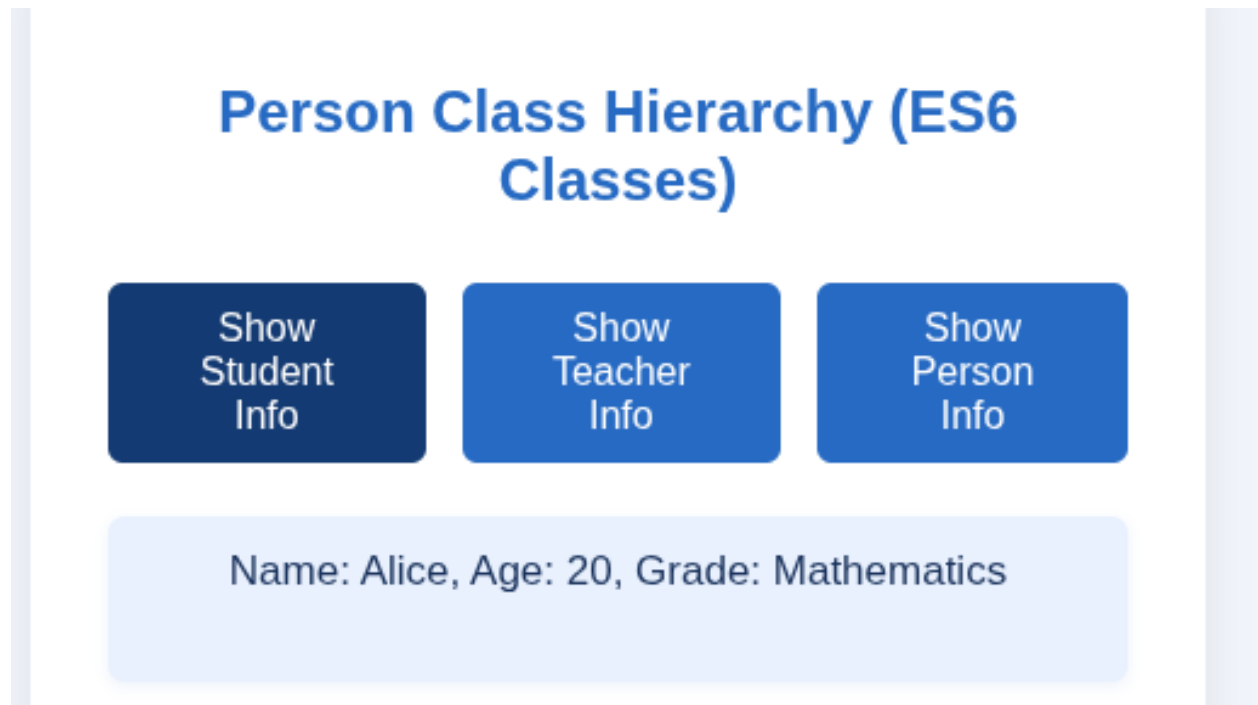
```
document.getElementById('studentBtn').onclick = function () {  
    document.getElementById('infoBox').textContent =  
student1.displayInfo();  
};  
document.getElementById('teacherBtn').onclick = function () {  
    document.getElementById('infoBox').textContent =  
teacher1.displayInfo();  
};  
document.getElementById('personBtn').onclick = function () {  
    document.getElementById('infoBox').textContent =  
person1.displayInfo();  
};  
</script>  
</body>  
</html>
```

OUTPUTS:

Basic Interface without any selection:



Interface after choosing "Show Student Info":



Interface after choosing “Show Teacher Info”:

Person Class Hierarchy (ES6 Classes)

Show Student Info

Show Teacher Info

Show Person Info

Name: Mr. Smith, Age: 45, Subject: Physics

Interface after choosing “Show Person Info”:

Person Class Hierarchy (ES6 Classes)

Show Student Info

Show Teacher Info

Show Person Info

Name: Bob, Age: 30