Session 1: Object Methods and the this Keyword

What is a Method?

In JavaScript, a method is a function that is a property of an object.

```
const person = {
  name: "Arta",
  greet: function() {
    console.log("Hello, my name is " + this.name);
  }
};
```

person.greet(); // Output: Hello, my name is Arta

The this Keyword

- this refers to the object that is calling the method.
- Inside an object method, this refers to the object itself.

```
const student = {
  name: "Blerim",
  age: 17,
  showInfo: function() {
    console.log(`Name: ${this.name}, Age: ${this.age}`);
  }
};
```

student.showInfo(); // Output: Name: Blerim, Age: 17

Why Use Methods?

- To organize related behavior inside an object.
- To use this to access object properties dynamically.

Practice:

- 1. Create an object called car with properties brand, year, and a method displayDetails() that logs them using this.
- 2. Create an object called book with a method to print its title and author.

• Session 2: Hands-On: Student Report Card System

Objective:

Build a simple object-based student report card using object methods and this keyword.

Instructions:

- 1. Each student should be represented by an object.
- 2. Each object should contain:
 - Name
 - Class
 - Grades (as an array)
 - A method to calculate the average
 - A method to determine pass/fail (pass if average >= 50)

Example:

```
const student1 = {
 name: "Elira",
 class: "10A",
 grades: [80, 75, 90],
 averageGrade: function() {
  let sum = 0;
  for(let i = 0; i < this.grades.length; i++) {
   sum += this.grades[i];
  }
  return sum / this.grades.length;
 },
 passOrFail: function() {
  const avg = this.averageGrade();
  if (avg >= 50) {
   return `${this.name} has passed.`;
  } else {
   return `${this.name} has failed.`;
}
};
console.log(student1.averageGrade());
console.log(student1.passOrFail());
```

Task for Students:

- Create 3 student objects.
- Each student should have their own averageGrade and pass0rFail method.
- Print each student's name, average grade, and pass/fail result.