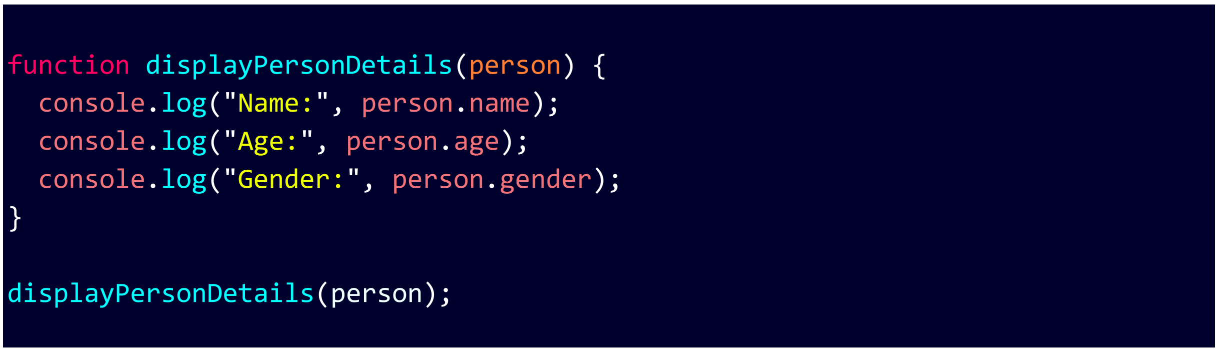
Practical 1

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body onload="prac1()">
    <script src="pr1.js"></script>
</body>
</html>
```

```javascript
function addNum(n1 , n2){
    return n1 + n2;
}

function prac1(){
    let name = "Harsh Dudhat";
    let age = 19;
    let isRobot = false;
//created by Harsh Dudhat 21CE026
    console.log("Name : " + name);
    console.log("Age : " + age);
    console.log("Robot : " + isRobot);

    const num1 = parseFloat(prompt("Enter Number 1 : "));
    const num2 = parseFloat(prompt("Enter Number 2 : "));

    console.log(addNum(num1, num2));

}
```

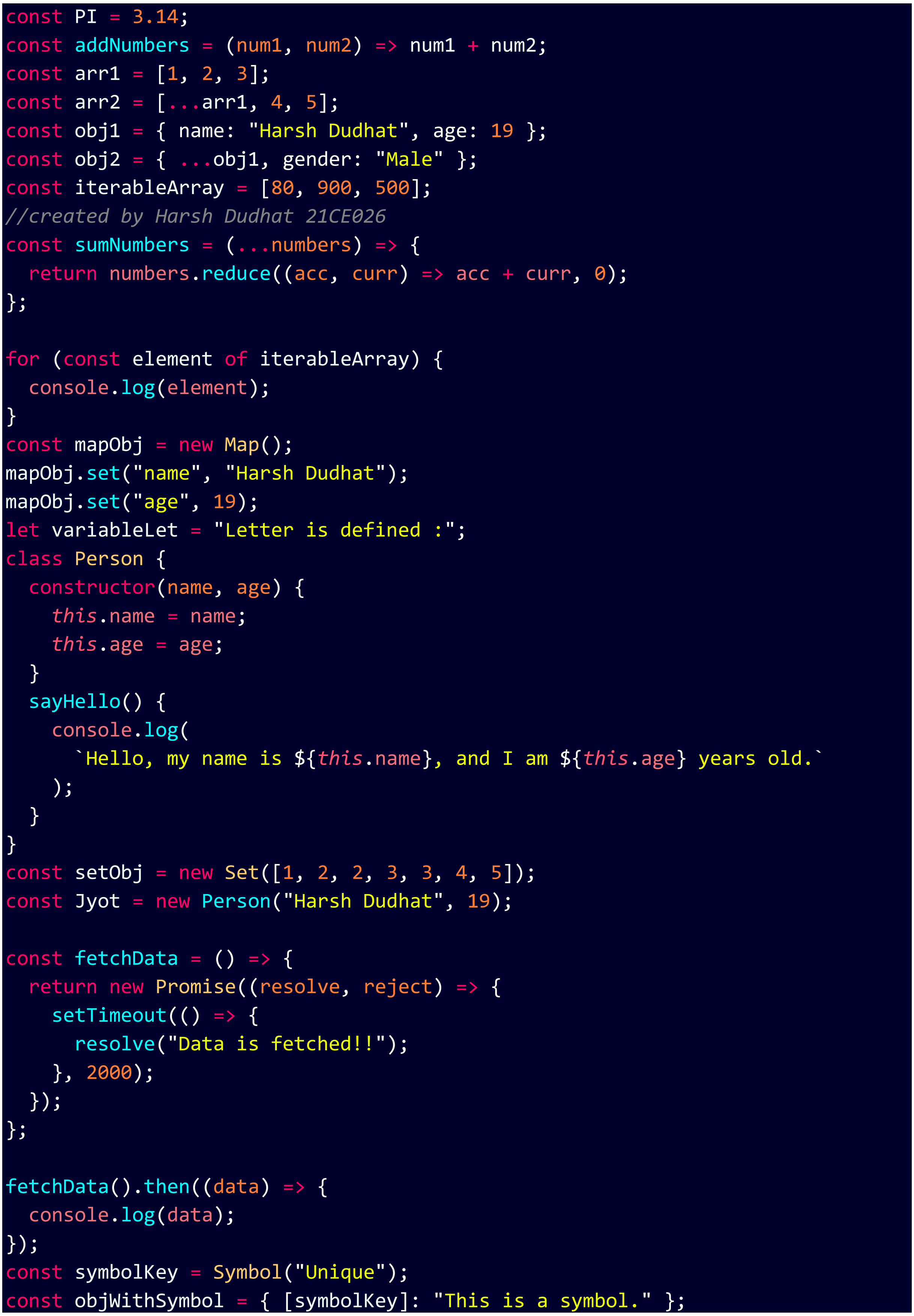
Practical 2

```
let arr = [2, "Harsh Dudhat", 5.25, 6.58965, 9];

console.log("Length of the array:", arr.length);

console.log("Element at index 2:", arr[2]);

arr.push("Jyot");
//created by Harsh Dudhat 21CE026
console.log("After push new Array :", arr);

arr.pop();
console.log("After pop : ", arr);

arr.unshift(0);
console.log("After unshift : ", arr);

arr.shift();
console.log("After shift:", arr);

let joinedArray = arr.join(", ");

console.log("Joined array:", joinedArray);

delete arr[2];
console.log("After delete:", arr);

let newArray = arr.concat([6, 7, 8]);
console.log("Concatenated array:", newArray);

let flattenedArray = newArray.flat();

console.log("Flattened array:", flattenedArray);

let splicedArray = arr.splice(1, 8, 18, 11);

console.log("After splice:", arr);

let slicedArray = arr.slice(2, 7);

console.log("Sliced array:", slicedArray);

let person = {
  name: "Harsh Dudhat",
  age: 20,
  gender: "Male",
};
```

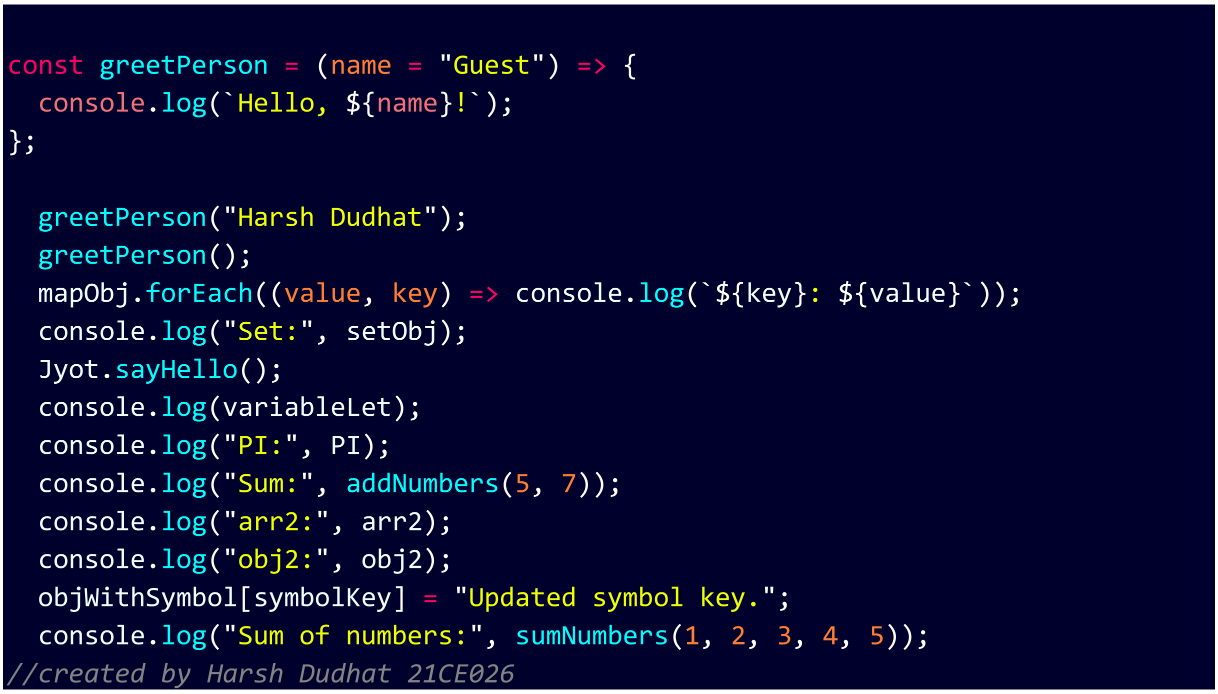


```
function displayPersonDetails(person) {
  console.log("Name:", person.name);
  console.log("Age:", person.age);
  console.log("Gender:", person.gender);
}

displayPersonDetails(person);
```

Practical 3

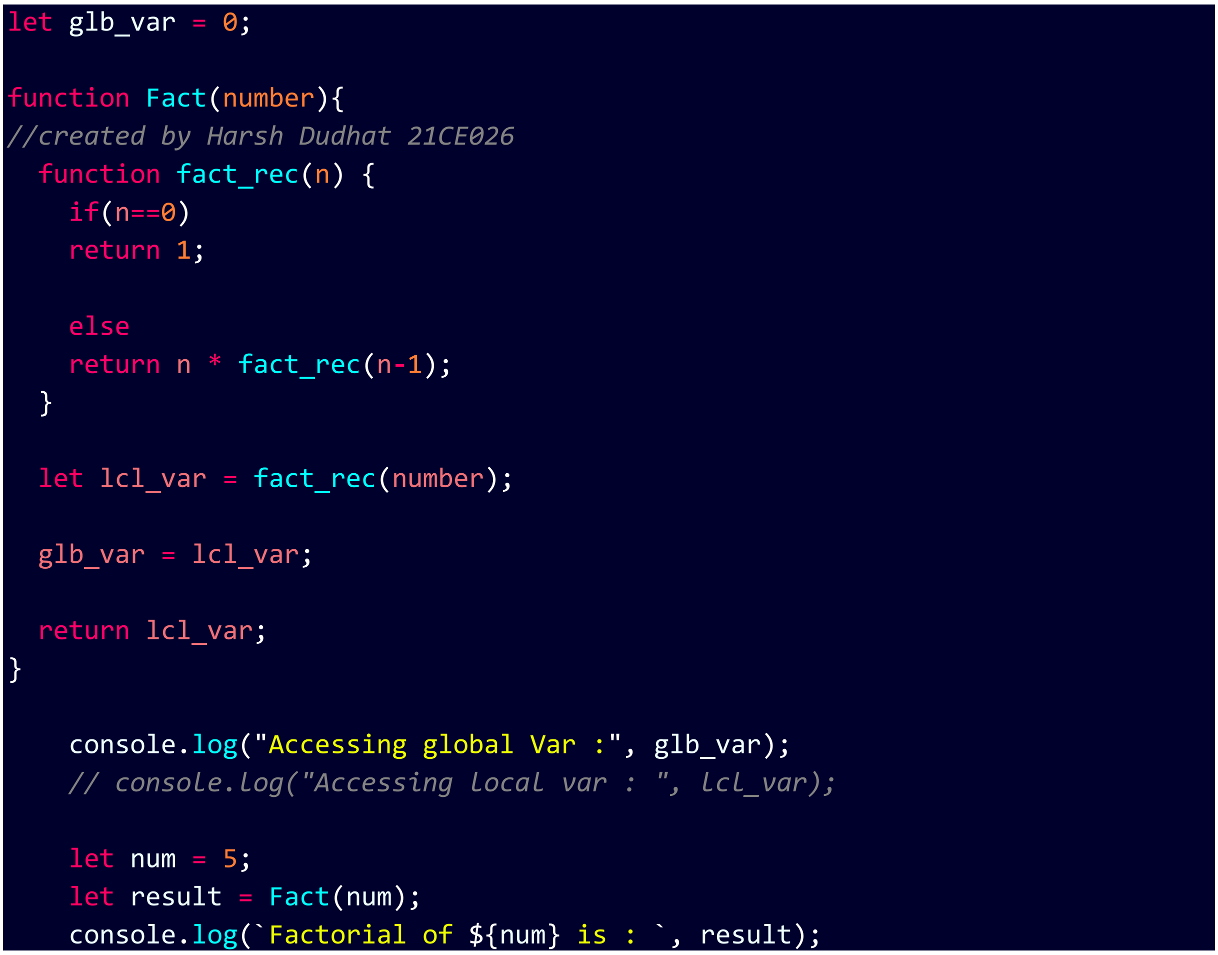


```
const PI = 3.14;
const addNumbers = (num1, num2) => num1 + num2;
const arr1 = [1, 2, 3];
const arr2 = [...arr1, 4, 5];
const obj1 = { name: "Harsh Dudhat", age: 19 };
const obj2 = { ...obj1, gender: "Male" };
const iterableArray = [80, 900, 500];
//created by Harsh Dudhat 21CE026
const sumNumbers = (...numbers) => {
  return numbers.reduce((acc, curr) => acc + curr, 0);
};

for (const element of iterableArray) {
  console.log(element);
}
const mapObj = new Map();
mapObj.set("name", "Harsh Dudhat");
mapObj.set("age", 19);
let variableLet = "Letter is defined :";
class Person {
  constructor(name, age) {
    this.name = name;
    this.age = age;
  }
  sayHello() {
    console.log(
      `Hello, my name is ${this.name}, and I am ${this.age} years old.`
    );
  }
}
const setObj = new Set([1, 2, 2, 3, 3, 4, 5]);
const Jyot = new Person("Harsh Dudhat", 19);

const fetchData = () => {
  return new Promise((resolve, reject) => {
    setTimeout(() => {
      resolve("Data is fetched!!");
    }, 2000);
  });
};

fetchData().then((data) => {
  console.log(data);
});
const symbolKey = Symbol("Unique");
const objWithSymbol = { [symbolKey]: "This is a symbol." };
```



```
const greetPerson = (name = "Guest") => {
  console.log(`Hello, ${name}!`);
};

  greetPerson("Harsh Dudhat");
  greetPerson();
  mapObj.forEach((value, key) => console.log(`${key}: ${value}`));
  console.log("Set:", setObj);
  Jyot.sayHello();
  console.log(variableLet);
  console.log("PI:", PI);
  console.log("Sum:", addNumbers(5, 7));
  console.log("arr2:", arr2);
  console.log("obj2:", obj2);
  objWithSymbol[symbolKey] = "Updated symbol key.";
  console.log("Sum of numbers:", sumNumbers(1, 2, 3, 4, 5));
//created by Harsh Dudhat 21CE026
```

Practical 4



```
let glb_var = 0;

function Fact(number){
//created by Harsh Dudhat 21CE026
  function fact_rec(n) {
    if(n==0)
    return 1;

    else
    return n * fact_rec(n-1);
  }

  let lcl_var = fact_rec(number);

  glb_var = lcl_var;

  return lcl_var;
}

    console.log("Accessing global Var :", glb_var);
    // console.log("Accessing local var : ", lcl_var);

    let num = 5;
    let result = Fact(num);
    console.log(`Factorial of ${num} is : `, result);
```