

1)write a class 'person' to hold the all details

Ans:

```
class Person {
  constructor(name, age, gender, email) {
    this.name = name;
    this.age = age;
    this.gender = gender;
    this.email = email;
  }

  introduceSelf() {
    console.log(`Hello, my name is ${this.name}.`);
  }

  displayDetails() {
    console.log(`Name: ${this.name}\nAge: ${this.age}\nGender:
${this.gender}\nEmail: ${this.email}`);
  }

  updateEmail(newEmail) {
    this.email = newEmail;
    console.log(`Email updated to ${this.email}`);
  }
}

// Example usage
let person1 = new Person("Jinu", 25, "male", "jinu12@gmail.com");
person1.introduceSelf();
person1.displayDetails();

person1.updateEmail("jinunick@gmail.com");
person1.displayDetails();
```

Result:

Hello, my name is Jinu.

Name: Jinu

Age: 25

Gender: male

Email: jinu12@gmail.com

Email updated to jinunick@gmail.com

Name: Jinu

Age: 25

Gender: male

Email: jinunick@gmail.com

2) Write a class to calculate the Uber price

Ans:

```
class UberPricingCalculator {
  constructor(baseFare, costPerMile, costPerMinute, bookingFee) {
    this.baseFare = baseFare;
    this.costPerMile = costPerMile;
    this.costPerMinute = costPerMinute;
    this.bookingFee = bookingFee;
  }

  calculatePrice(distanceInMiles, tripDurationInMinutes, surgeMultiplier = 1) {
    const distanceCost = distanceInMiles * this.costPerMile;
    const timeCost = tripDurationInMinutes * this.costPerMinute;
    const totalCost = (this.baseFare + distanceCost + timeCost + this.bookingFee) * surgeMultiplier;

    return totalCost.toFixed(2); // Returns the total cost formatted to 2 decimal places
  }
}

// Example usage
const uberCalculator = new UberPricingCalculator(2.00, 0.80, 0.25, 1.50);
const price = uberCalculator.calculatePrice(5, 15); // 5 miles, 15 minutes
console.log(`The total Uber fare is: ${price}`);

// Example with surge pricing
const surgePrice = uberCalculator.calculatePrice(5, 15, 1.5); // 50% surge pricing
console.log(`The total Uber fare with surge pricing is: ${surgePrice}`);
```

Result:

The total Uber fare is: \$11.25

The total Uber fare with surge pricing is: \$16.88