**1.movies.md**

class Movie {

constructor(title, studio, rating) {

this.title = title;

this.studio = studio;

this.rating = rating || "PG";

}

static getPG(movies) {

const pgMovies = [];

for (const movie of movies) {

if (movie.rating === "PG")

{

pgMovies.push(movie);

}

}

return pgMovies;

}

}

// Creating an instance of the Movie class with the default "PG" rating

const casinoRoyale = new Movie("Casino Royale", "Eon Productions");

// Example array of Movie instances

const movieArray = [ new Movie("Movie1", "Studio1", "PG"), new Movie("Movie2", "Studio2", "PG-13"), new Movie("Movie3", "Studio3", "R"), new Movie("Movie4", "Studio4"), ];

// Filtering movies with a rating of "PG"

const pgMovies = Movie.getPG(movieArray);

console.log(pgMovies);

**2.Circle.md**

class Circle {

constructor(radius, color) {

this.radius = radius;

this.color = color;

}

getRadius() {

return this.radius;

}

setRadius(radius) {

this.radius = radius;

}

getColor() {

return this.color;

}

setColor(color) {

this.color = color;

}

toString() {

return `Circle with radius ${this.radius} and color ${this.color}`;

}

getArea() {

return Math.PI \* this.radius \* this.radius;

}

getCircumference() {

return 2 \* Math.PI \* this.radius;

}

}

const circle = new Circle(5, "blue");

console.log(circle.toString());

console.log(circle.getArea());

console.log(circle.getCircumference());

**3.Persons Details**

class Person {

constructor(firstName, lastName, age, email) {

this.firstName = firstName;

this.lastName = lastName;

this.age = age;

this.email = email;

}

getFullName() {

return `${this.firstName} ${this.lastName}`;

}

greet() {

console.log(`Hello, my name is ${this.getFullName()} and I am ${this.age} years old.`);

}

setEmail(newEmail) {

this.email = newEmail;

console.log(`Email updated to: ${this.email}`);

}

}

// Creating an instance of the Person class

const person1 = new Person("Rahul", “Gupta", 23, "rahulgupta26111997@gmail.com.");

// Accessing properties and methods of the person1 object

console.log(person1.getFullName()); // Rahul Gupta

person1.greet(); // Hello, my name is Rahul Gupta and I am 23 years old.

person1.setEmail("rahulgupta26111997@gmail.com");

// Email updated to:[rahulgupta26111997@gmail.com](mailto:rahulgupta26111997@gmail.com)

**4.Uber price calculator**

class UberPriceCalculator {

constructor(baseFare, ratePerKilometer, additionalCharges) {

this.baseFare = baseFare;

this.ratePerKilometer = ratePerKilometer;

this.additionalCharges = additionalCharges;

}

calculatePrice(distanceInKm) {

if (distanceInKm <= 0) {

return 0; // Handle invalid input gracefully

}

// Calculate the price

const price = this.baseFare + distanceInKm \* this.ratePerKilometer + this.additionalCharges;

return price;

}

}

const calculator = new UberPriceCalculator(3.5, 1.2, 2.0);

const distance = 10;dist in km

const price = calculator.calculatePrice(distance);

console.log(`The Uber price for a ${distance} km ride is $${price}`);