1.The class Movie is stated below. An instance of class Movie represents a film. This class has the following three properties:

* title, which is a String representing the title of the movie
* studio, which is a String representing the studio that made the movie
* rating, which is a String representing the rating of the movie (i.e. PG­13, R, etc)

a) Write a constructor for the class Movie, which takes a String representing the title of the movie, a String representing the studio, and a String representing the rating as its arguments, and sets the respective class properties to these values.

b) The constructor for the class Movie will set the class property rating to "PG" as default when no rating is provided.

c) Write a method getPG, which takes an array of base type Movie as its argument, and returns a new array of only those movies in the input array with a rating of "PG". You may assume the input array is full of Movie instances. The returned array need not be full.

d) Write a piece of code that creates an instance of the class Movie with the title “Casino Royale”, the studio “Eon Productions”, and the rating “PG­13”

class Movie

{

constructor(title,studio,rating="PG")

{

this.title=title;

this.studio=studio;

this.rating=rating;

}

static getPG(array)

{

let result=[];

for(let i=0;i<array.length;i++)

{

if(array[i].rating=="PG")

{

result.push(array[i].title)

}

}

return result;

}

}

const movieobject1=new Movie("Casino Royale","Eon Productions","PG­13")

const movieobject2=new Movie("cindrala","disney Productions","PG")

const movieobject3=new Movie("Robinhood","ABC Productions")

const movieobject4=new Movie("cindrala","disney Productions","R7")

let instance=[movieobject1,movieobject2,movieobject3,movieobject4]

console.log(Movie.getPG(instance))

output:

(2) ["cindrala", "Robinhood"]

0: "cindrala"

1: "Robinhood"length:

2[[Prototype]]: Array(0)

3. **Write a “person” class to hold all the details**

//Write a “person” class to hold all the details.

class Person

{

constructor(name,age,gender,contact,e\_mail,address)

{

this.name=name;

this.age=age;

this.gender=gender;

this.contact=contact;

this.e\_mail=e\_mail;

this.address=address

}

displaydetail()

{

console.log(`name : ${this.name}\nage : ${this.age} \ngender : ${this.gender} \ncontact : ${this.contact} \ne\_mail : ${this.e\_mail}\naddress : ${this.address}`)

}

}

const personobject= new Person("anu","23","female","12345678","anu@gmail.com","xyz")

personobject.displaydetail();

console.log(personobject)

output:

name : anu

age : 23

gender : female

contact : 12345678

e\_mail : anu@gmail.com

address : xyz

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1. *Person {name: "anu", age: "23", gender: "female", contact: "12345678", e\_mail: "anu@gmail.com", …}*
   1. address: "xyz"
   2. age: "23"
   3. contact: "12345678"
   4. e\_mail: "anu@gmail.com"
   5. gender: "female"
   6. name: "anu"

**4.write a class to calculate uber price.**

// **write a class to calculate uber price.**

class Uber

{

constructor(distance,price\_perkm)

{

this.default\_distance=distance;

this.default\_price\_perkm=price\_perkm;

this.default\_bill\_amount=this.default\_distance\*this.default\_price\_perkm;

}

calculation(distance,price\_perkm)

{

this.distance=distance;

this.price\_perkm=price\_perkm;

if(this.distance<1)

this.bill\_amount=this.default\_bill\_amount

else

this.bill\_amount=this.distance\*this.price\_perkm;

}

displayResult()

{

console.log(`Thank you for using our service \nDistance you Travelled = ${this.distance} km\nBill Amount : ${this.bill\_amount}`)

}

}

const uberobject=new Uber(1,20);

uberobject.calculation(100,20)

uberobject.displayResult();

uberobject.calculation(60,20)

uberobject.displayResult();

uberobject.calculation(.5,20)

uberobject.displayResult();

output:

Thank you for using our service

Distance you Travelled = 100 km

Bill Amount : 2000

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Distance you Travelled = 60 km

Bill Amount : 1200

fn.js:24 Thank you for using our service

Distance you Travelled = 0.5 km

Bill Amount : 20