**1.Class - Movie**

**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.**

class Movie{

constructor(title,studio,rating){

this.title=title;

this.studio=studio;

this.rating=rating;

}}

let s1=new Movie("Teddy","SK","PG13");

console.log(s1);

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

class Movie{

constructor(title,studio,rating){

this.title=title;

this.studio=studio;

this.rating=rating;

}

getpg(){

this.rating===" ";

return "PG";

}

}

let s1=new Movie("Casino Royale","Eon Productions"," ");

console.log(s1.getpg());

**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.**

class Movie{

constructor(title,studio,rating){

this.title=title;

this.studio=studio;

this.rating=rating;

}

getpg(){

this.rating===" PG";

return this.title==this.rating;

}

}

let s1=new Movie("Casino Royale","Eon Productions","PG");

let s2=new Movie("Casino","Eon Production","3");

console.log(s1,s2.getpg());

**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”**

let s1=new Movie("Casino Royale","Eon Productions","PG13");

console.log(s1);

**2.Convert the UML diagram to Typescript class. - use number for double**

const pi=3.14;

class Circle{

constructor(radius,color){

this.radius=radius;

this.color=color;

}

getarea(){

return pi\*this.radius\*this.radius;

}}

let area=new Circle(5,"red");

console.log(area.getarea());

getcircumference();{

return 2\*pi\*this.radius;

}

let circumference=new Circle(5,red);

console.log(circumference.getcircumference());

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

class Person{

constructor(Name,DOB,Address,MobileNo,){

this.Name=Name;

this.DOB=DOB;

this.Address=Address;

this.MobileNo=MobileNo;

}

}

let details=new Person("Ela","10thMarch,","tamilnadu","123")

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

const km=18;

class Uber{

constructor(distance){

this.distance=distance;

}

getprice(){

return km\*this.distance;

}

}

let price=new Uber(5);

console.log(price.getprice());