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

**Get radius:**

class circle{

constructor(radius,color){

this.radius=radius;

this.color=color;

}

getradius(){

return(this.radius);

}

}

let s1=new circle(1.0,"black");

console.log(s1.getradius());

**Get Area:**

const pi=3.1412;

class circle{

constructor(radius,color){

this.radius=radius;

this.color=color;

}

getarea(){

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

}

}

let s1=new circle(1.0,"black");

console.log(s1.getarea());

**Get Circumference:**

const pi=3.1412;

class circle{

constructor(radius,color){

this.radius=radius;

this.color=color;

}

getcircumference(){

return(2\*pi\*this.radius);

}

}

//constructor call

let s1=new circle(1.0,"black");

console.log(s1.getcircumference());

**Get color:**

const pi=3.1412;

class circle{

constructor(radius,color){

this.radius=radius;

this.color=color;

}

getcolor(){

return(this.color);

}

}

//constructor call

let s1=new circle(1.0,"black");

console.log(s1.getcolor());

# **Class - Movie**

**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;

}

**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="PG"){

this.title=title;

this.studio=studio;

this.rating=rating;

}

**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){

this.title=title;

this.studio=studio;

this.rating=rating;

}

getPG(){

}

}

let s1=new movie("The Conjuring","Warnerbros","R");

let s2=new movie("The Lion King","Waltdisney","PG");

let s3=new movie("Casino Royale","Eon Productions","PG.13");

console.log(s3);

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

class Person{

constructor(FirstName,LastName,Age,Gender,Nationality){

this.FirstName=FirstName;

this.LastName=LastName;

this.Age=Age;

this.Gender=Gender;

this.Nationality=Nationality;

}

}

let s1=new Person("Swetha","Ravichandran",22,"Female","Indian");

let s2=new Person("San","soundaraj",22,"Female","Indian");

let s3=new Person("nizar","Mohammed",23,"Male","Indian");

let s4=new Person("Sara","Sekar",22,"Female","Indian");

console.log(s1,s2,s3,s4);

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

var basefare=48;

var costpm=1;

var costpml=14;

var bookingfee=10;

class movie{

constructor(time,distance){

this.time=time;

this.distance=distance;

}

getUberprice(){

return(basefare+(costpm\*this.time)+(costpml\*this.distance)+bookingfee);

}

}

let s1=new movie(80,29);

console.log(s1.getUberprice());