Requiremet 1

```
class Movie {

String movie_name, language, genere, rating;


public Movie(String movie_name, String language, String genere, String rating) {

this.movie_name = movie_name;

this.language = language;

this.genere = genere;

this.rating = rating;

}


void displayMovieInfo() {

System.out.println("Movie: " + movie_name);

System.out.println("Language: " + language);

System.out.println("Genre: " + genere);

System.out.println("Rating: " + rating);

}


}


class NowShowing extends Movie {


String showTime;
```

```
public NowShowing(String movie_name, String language, String genere, String rating, String showTime) {
super(movie_name, language, genere, rating);
this.showTime = showTime;
}

void displayMovieInfo() {
System.out.println("NowShowing");

System.out.println("Movies in Theatre ");
System.out.println("------------------------");
System.out.println("Movie: " + movie_name);
System.out.println("Language: " + language);
System.out.println("Genre: " + genere);
System.out.println("Rating: " + rating);
System.out.println("Show Time: " + showTime);
}

}

class ComingSoon extends Movie {
String releaseDate;

public ComingSoon(String movie_name, String language, String genere, String rating, String releaseDate) {
```

```
super(movie_name, language, genere, rating);
this.releaseDate = releaseDate;
}

void displayMovieInfo() {
System.out.println("ComingSoon ");
System.out.println("Upcoming Movies ");
System.out.println("-----------------------");
System.out.println("Movie: " + movie_name);
System.out.println("Language: " + language);
System.out.println("Genre: " + genere);
System.out.println("Rating: " + rating);
System.out.println("Release Date: " + releaseDate);

}
}

public class Requirement1 {

public static void main(String[] args) {
NowShowing n = new NowShowing("KGF", "Kannada", "Action", " 4.9/5 ", " 10:00AM ");
n.displayMovieInfo();
System.out.println();
ComingSoon m = new ComingSoon("Fantasic4", "English", "Action", "NA", "25-July-2025");
```

```
m.displayMovieInfo();

}

}
```

Output:

Requirement 2

```
class ShoppingCart {
    String name;
    int quantity;
    double total, price;

    public ShoppingCart(String name, int quantity, double total, double price) {
        this.name = name;
        this.quantity = quantity;
        this.total = total;
        this.price = price * quantity;
    }

    public ShoppingCart(String name) {
        this.name = name;
    }

    public ShoppingCart(String name, int quantity) {
        this.name = name;
        this.quantity = quantity;
    }
```

```
    public void displayItems() {
        System.out.println("ElectronicProducts ");
        System.out.println("Product: " + name);
        System.out.println("Quantity: " + quantity);
        System.out.println("Price: " + price);
        System.out.println("Total:  " + total);

    }

}

class ElectronicProducts extends ShoppingCart {
    String warrenty;

    ElectronicProducts(String name, int quantity, double total, double price, String warrenty) {
        super(name, quantity, total, price);
        this.warrenty = warrenty;

    }

    ElectronicProducts(String name, int quantity, String warrenty) {
        super(name, quantity);
        this.warrenty = warrenty;
```

```
        System.out.println("ElectronicProduct ");
        System.out.println("Product: " + name);
        System.out.println("Quantity: " + quantity);
        System.out.println("Warranty: " + warrenty);

    }

    public void displayItems() {
        System.out.println("ElectronicProducts ");
        System.out.println("Product: " + name);
        System.out.println("Quantity: " + quantity);
        System.out.println("Price: " + price);
        System.out.println("Total:  " + total);
        System.out.println("Warranty: " + warrenty);

    }
}

class ClothProducts extends ShoppingCart {
    String size;

    public ClothProducts(String name, int quantity, double total, double price, String size) {
        super(name, quantity, total, price);
        this.size = size;
```

```
    }

    public ClothProducts(String name, String size) {
        super(name);
        this.size = size;
        System.out.println("ClothProduct");
        System.out.println("Product: " + name);
        System.out.println("Size: " + size);
    }

    public void displayItems() {
        System.out.println("ClothProduct ");
        System.out.println("Product: " + name);
        System.out.println("Quantity: " + quantity);
        System.out.println("Price: " + price);
        System.out.println("Total:  " + total);
        System.out.println("Size: " + size);

    }

}

public class Requirement2 {
    public static void main(String[] args) {
```

```
        ElectronicProducts e = new ElectronicProducts("iPhone ", 1, 15000, 15000, "4 years");
        e.displayItems();
        System.out.println();
        ClothProducts c = new ClothProducts("shirt", 2, 1000, 2000, "Medium");
        c.displayItems();
        System.out.println();
        ElectronicProducts e1 = new ElectronicProducts("Headphones ", 3, "1 year");
        System.out.println();
        ClothProducts c1 = new ClothProducts("Shoes", "8");

    }

}
```

Output:

```
ElectronicProducts
Product: iPhone
Quantity: 1
Price: 15000.0
Total:  15000.0
Warranty: 4 years

ClothProduct
Product: shirt
Quantity: 2
Price: 4000.0
Total:  1000.0
Size: Medium

ElectronicProduct
Product: Headphones
Quantity: 3
Warranty: 1 year

ClothProduct
Product: Shoes
Size: 8
```

Requirement 3

```
class Employee {

    String name, job;

    int age;

    Double sal;



    public Employee(String name, String job, int age, Double sal) {

        this.name = name;

        this.job = job;

        this.age = age;

        this.sal = sal;

    }
```

```
    public void displayEmplInfo() {
        System.out.println("Name: " + name);
        System.out.println("Age: " + age); // fixed
        System.out.println("Job: " + job);
        System.out.println("Salary: " + sal);
    }
}

class DayShift extends Employee {
    String timing;

    public DayShift(String name, String job, int age, Double sal, String timing) {
        super(name, job, age, sal);
        this.timing = timing;
    }

    public void displayEmplInfo() {
        System.out.println("DayShift ");
        System.out.println("Name: " + name);
        System.out.println("Age: " + age);
        System.out.println("Job: " + job);
        System.out.println("Salary: " + sal);
        System.out.println("Timings: " + timing);
    }
```

```
}

class NightShift extends Employee {
    String timing;
    double night_allowance;

     public NightShift(String name, String job, int age, Double sal, String timing, double night_allowance) {
        super(name, job, age, sal);
        this.timing = timing;
        this.night_allowance = night_allowance;
    }

    public void displayEmplInfo() {
        System.out.println("NightShift");
        System.out.println("Name: " + name);
        System.out.println("Age: " + age);
        System.out.println("Job: " + job);
        System.out.println("Salary: " + sal);
        System.out.println("Timings: " + timing);
        System.out.println("Night-Allowance: " + night_allowance);
    }
}

class Senior extends DayShift {
```

```
    int experience;

    public Senior(String name, String job, int age, Double sal, String timing, int experience) {
        super(name, job, age, sal, timing);
        this.experience = experience;
    }

    public void displayEmplInfo() {
        System.out.println("Senior ");
        System.out.println("Name: " + name);
        System.out.println("Age: " + age);
        System.out.println("Job: " + job);
        System.out.println("Salary: " + sal);
        System.out.println("Timings: " + timing);
        System.out.println("Experience[in years]: " + experience);
    }
}

class Junior extends DayShift {
    String manager;

    public Junior(String name, String job, int age, Double sal, String timing, String manager) {
        super(name, job, age, sal, timing);
        this.manager = manager;
```

```
    }

    public void displayEmplInfo() {
        System.out.println("Junior ");
        System.out.println("Name: " + name);
        System.out.println("Age: " + age);
        System.out.println("Job: " + job);
        System.out.println("Salary: " + sal);
        System.out.println("Timings: " + timing);
        System.out.println("Manager: " + manager);
    }
}

public class Requirement3 {
    public static void main(String[] args) {
        NightShift n = new NightShift("Roy", "Manager", 40, 40000.0, "3 PM to 6 AM", 3000);
        n.displayEmplInfo();
        System.out.println();

        DayShift d = new DayShift("Kumar", "Developer", 32, 45000.0, "9 AM to 6 PM");
        d.displayEmplInfo();
        System.out.println();

        Senior s = new Senior("Kumar", "Developer", 32, 45000.0, "9 AM to 6 PM", 7);
```

```
        s.displayEmplInfo();
        System.out.println();

        Junior j = new Junior("Ragav", "Developer", 28, 35000.0, "9 AM to 6 PM", "Kumar");
        j.displayEmplInfo();
    }
}
```

Output:

```
NightShift
Name: Roy
Age: 40
Job: Manager
Salary: 40000.0
Timings: 3 PM to 6 AM
Night-Allowance: 3000.0

DayShift
Name: Kumar
Age: 32
Job: Developer
Salary: 45000.0
Timings: 9 AM to 6 PM

Senior
Name: Kumar
Age: 32
Job: Developer
Salary: 45000.0
Timings: 9 AM to 6 PM
Experience[in years]: 7

Junior
Name: Ragav
Age: 28
Job: Developer
Salary: 35000.0
Timings: 9 AM to 6 PM
Manager: Kumar
```