**ALPHA DEVELOPERS**

**PROFFESSIONAL.JAVA**

**public class Professional extends Employee{**

**private double yearsOfExperience;**

**public double getYearsOfExperience() {**

**return yearsOfExperience;}**

**public void setYearsOfExperience(double yearsOfExperience) {**

**this.yearsOfExperience = yearsOfExperience;}**

**public Professional(long employeeId,**

**String employeeName,**

**String department,**

**double rating, double yearsOfExperience){**

**super(employeeId,employeeName,department,rating);**

**this.yearsOfExperience = yearsOfExperience;}**

**public double calculateProfessionalPay(){**

**double basePay = 0 ;**

**if(this.yearsOfExperience>=1 && this.yearsOfExperience<=2){**

**basePay = 25000;}**

**else if(this.yearsOfExperience>=3 && this.yearsOfExperience<=5){**

**basePay = 50000; }**

**else if(this.yearsOfExperience>=6 && this.yearsOfExperience<=8){**

**basePay = 75000; }**

**else if(this.yearsOfExperience>=9 && this.yearsOfExperience<=12){**

**basePay = 100000; }**

**else if(this.yearsOfExperience>=12){**

**basePay = 150000;**

**}else return -1;**

**return basePay\*this.rating;}}**

***intern.java***

**public class Intern extends Employee{**

**private int noOfDays;**

**public int getNoOfDays() {**

**return noOfDays;}**

**public void setNoOfDays(int noOfDays) {**

**this.noOfDays = noOfDays;}**

**public Intern(long employeeId,**

**String employeeName,**

**String department,**

**double rating, int noOfDays){**

**super(employeeId,employeeName,department,rating);**

**this.noOfDays = noOfDays; }**

**public double calculateInternPay(){**

**double basePay = 0;**

**if(noOfDays >=1 && noOfDays<=30){**

**basePay = 8000;**

**}else if(noOfDays >=31 && noOfDays<=60){**

**basePay = 16000;}**

**else if(noOfDays >=61 && noOfDays<=90){**

**basePay = 24000; }**

**else if(noOfDays >=91 && noOfDays<=120){**

**basePay = 32000;}**

**else if(noOfDays >=121 && noOfDays<=180){**

**basePay = 40000;**

**}else return -1;**

**return basePay \*this.rating; }}**

***Employee.java***

**public class Employee {**

**protected long employeeId;**

**protected String employeeName;**

**protected String department;**

**protected double rating;**

**public long getEmployeeId() {**

**return employeeId;}**

**public void setEmployeeId(long employeeId) {**

**this.employeeId = employeeId;}**

**public String getEmployeeName() {**

**return employeeName;}**

**public void setEmployeeName(String employeeName) {**

**this.employeeName = employeeName;}**

**public String getDepartment() {**

**return department;}**

**public void setDepartment(String department) {**

**this.department = department;}**

**public double getRating() {**

**return rating;}**

**public void setRating(double rating) {**

**this.rating = rating;}**

**public Employee(long employeeId, String employeeName, String department, double rating) {**

**super();**

**this.employeeId = employeeId;**

**this.employeeName = employeeName;**

**this.department = department;**

**this.rating = rating;}**

**public Employee() {**

**super();}}**

***SKYAPPS***

**Product.java**

**//Do not make changes in the Parent class**

**public class Product {**

**private int productId;**

**private String productType;**

**private int noOfProduct;**

**private double perProductPrice;**

**public int getProductId() {**

**return productId;}**

**public void setProductId(int productId) {**

**this.productId = productId;}**

**public int getNoOfProduct() {**

**return noOfProduct;}**

**public void setNoOfProduct(int noOfProduct) {**

**this.noOfProduct = noOfProduct;}**

**public String getProductType() {**

**return productType;}**

**public void setProductType(String productType) {**

**this.productType = productType;}**

**public double getPerProductPrice() {**

**return perProductPrice;}**

**public void setPerProductPrice(double perProductPrice) {**

**this.perProductPrice = perProductPrice;}**

**public Product(int productId, String productType, int noOfProduct,double perProductPrice) {**

**super();**

**this.productId = productId;**

**this.productType = productType;**

**this.noOfProduct = noOfProduct;**

**this.perProductPrice=perProductPrice;}}**

**IP.JAVA**

**public class ImportedProduct extends Product{**

**private double additionalTax;**

**public double getAdditionalTax() {**

**return additionalTax;}**

**public void setAdditionalTax(double additionalTax) {**

**this.additionalTax = additionalTax;  }**

**public ImportedProduct(int productId, String productType, int noOfProduct, double perProductPrice, double additionalTax) {**

**super(productId, productType, noOfProduct, perProductPrice);**

**this.additionalTax = additionalTax;}**

**public double calculateImportedProductPrice() {**

**double totalPrice = getNoOfProduct() \* getPerProductPrice();**

**double finalPrice = totalPrice + (totalPrice \* (getAdditionalTax() / 100));**

**return finalPrice;}}**

**DP.java**

**public class DomesticProduct extends Product{**

**private double discount;**

**public double getDiscount() {**

**return discount;  }**

**public void setDiscount(double discount) {**

**this.discount = discount;}**

**public DomesticProduct(int productId, String productType, int noOfProduct, double perProductPrice, double discount) {**

**super(productId, productType, noOfProduct, perProductPrice);**

**this.discount = discount;}**

**public double calculateDomesticProductPrice() {**

**double totalPrice = getNoOfProduct() \* getPerProductPrice();**

**double discountedPrice = totalPrice - (totalPrice \* (getDiscount() / 100));**

**return discountedPrice;}}**

**AMAZON**

**public class Amazon extends OnlineShopping{**

**private  String subscription;**

**public String getSubscription() {**

**return subscription; }**

**public void setSubscription(String subscription) {**

**this.subscription = subscription;}**

**public Amazon(String userId,String productName, int quantity, double price) {**

**super(userId,productName, quantity, price);}**

**@Override**

**public double calculatePrice() {**

**double result=quantity\*price;**

**setSubscription(null);**

**if(quantity>0 && price>0){**

**if(result>=2000){**

**setSubscription("Congrats, you have got 1 month free subscritpion");}**

**else{**

**setSubscription("Not eligible for subscritpion");}  }**

**else{**

**setSubscription("No subscription");**

**result=-1;  }**

**return result; }**

**@Override**

**public String toString() {**

**return "\nFlipkart:\nProductName: " + productName + "\nQuantity:"**

**+ quantity + "\n" + calculatePrice();}}**

***Flipkart***

**public class Flipkart extends OnlineShopping{**

**private double superCoins;**

**public double getSuperCoins() {**

**return superCoins;}**

**public void setSuperCoins(double superCoins) {**

**this.superCoins = superCoins;}**

**public Flipkart(String userId,String productName, int quantity, double price) {**

**super(userId,productName, quantity, price);}**

**@Override**

**public double calculatePrice() {**

**double coins=0;**

**double result=quantity\*price;**

**if(quantity>0 && price>0){**

**if(result>=2000){coins=result-2000;}**

**else{**

**coins=0;}**

**setSuperCoins(coins);  }**

**else  {  result=-1;}**

**return result;}}**

***Online.java***

**public abstract class OnlineShopping {**

**protected String userId;**

**protected String productName;**

**protected int quantity;**

**protected double price;**

**public String getUserId() {**

**return userId;}**

**public void setUserId(String userId) {**

**this.userId = userId;}**

**public String getProductName() {**

**return productName;}**

**public void setProductName(String productName) {**

**this.productName = productName;}**

**public int getQuantity() {**

**return quantity;}**

**public void setQuantity(int quantity) {**

**this.quantity = quantity;}**

**public double getPrice() {**

**return price;}**

**public void setPrice(double price) {**

**this.price = price;}**

**public OnlineShopping(String userId,String productName, int quantity, double price) {**

**super();**

**this.userId=userId;**

**this.productName = productName;**

**this.quantity = quantity;**

**this.price = price;}**

**abstract public double calculatePrice();}**

**SINGER.JAVA**

**public class Singer extends Artist{**

**private int noOfSong;**

**public int getNoOfSong() {**

**return noOfSong;}**

**public void setNoOfSong(int noOfSong) {**

**this.noOfSong = noOfSong;}**

**public Singer(int artistId, String artistName, String artistType, int experience, int noOfSong) {**

**super(artistId, artistName, artistType, experience);**

**this.noOfSong = noOfSong;}**

**public double calculatePaymentOfSinger() {**

**double a=getExperience()\*noOfSong\*10000;**

**return a;}}**

***Dancer***

**public class Dancer extends Artist{**

**private int noOfChoreography;**

**public int getNoOfChoreography() {**

**return noOfChoreography;}**

**public void setNoOfChoreography(int noOfChoreography) {**

**this.noOfChoreography = noOfChoreography;}**

**public Dancer(int artistId, String artistName, String artistType, int experience, int noOfChoreography) {**

**super(artistId, artistName, artistType, experience);**

**this.noOfChoreography = noOfChoreography;}**

**public double calculatePaymentOfDancer() {**

**double a=getExperience()\*noOfChoreography\*10000;return a;}}**

***Employee.java***

**//write and implement the business requirements in this class**

**public double calculateIncrementSalary(){**

**if(!(age >=21 && age<=60)) return -1;**

**if(!(Character.toLowerCase(gender) == 'f' || Character.toLowerCase(gender) == 'm') ) return -1;**

**if(!(experience>=0 && experience<=10)) return -1;**

**if(experience>=1 && experience<=3) return salary\*1.10;**

**if(experience>=4 && experience<=6) return salary\*1.20;**

**if(experience>=7 && experience<=10) return salary\*1.30;**

**return salary;}}**

***Employee.utility.java***

**public class EmployeeUtility{**

**public  Employee extractDetails(String employeeDetails){**

**String details[] = employeeDetails.split(":");**

**Employee emp = new Employee(details[0],details[1],Integer.parseInt(details[2]),details[3].charAt(0),Double.parseDouble(details[4]),Integer.parseInt(details[5]));**

**return emp;}}**

**INTERN.JAVA**

**public class Intern {**

**protected String name;**

**protected String emailId;**

**protected String collegeName;**

**protected String location;**

**protected String type;**

**protected double certificationFee;**

**public Intern() {}**

**public Intern(String name, String emailId, String collegeName, String location, String type, double certificationFee) {**

**this.name = name;**

**this.emailId = emailId;**

**this.collegeName = collegeName;**

**this.location = location;**

**this.type = type;**

**this.certificationFee = certificationFee;**

**}**

**// Getters and Setters for all attributes**

**public String getName() { return name; }**

**public void setName(String name) { this.name = name; }**

**public String getEmailId() { return emailId; }**

**public void setEmailId(String emailId) { this.emailId = emailId; }**

**public String getCollegeName() { return collegeName; }**

**public void setCollegeName(String collegeName) { this.collegeName = collegeName; }**

**public String getLocation() { return location; }**

**public void setLocation(String location) { this.location = location; }**

**public String getType() { return type; }**

**public void setType(String type) { this.type = type; }**

**public double getCertificationFee() { return certificationFee; }**

**public void setCertificationFee(double certificationFee) { this.certificationFee = certificationFee; }**

**}**

**BEGIN**

**public class BeginnerIntern extends Intern {**

**private int noOfDays;**

**private double platformFee;**

**public BeginnerIntern(String name, String emailId, String collegeName, String location, String type, double certificationFee, int noOfDays, double platformFee) {**

**super(name, emailId, collegeName, location, type, certificationFee);**

**this.noOfDays = noOfDays;**

**this.platformFee = platformFee;}**

**// Getters and Setters for noOfDays and platformFee**

**public int getNoOfDays() { return noOfDays; }**

**public void setNoOfDays(int noOfDays) { this.noOfDays = noOfDays; }**

**public double getPlatformFee() { return platformFee; }**

**public void setPlatformFee(double platformFee) { this.platformFee = platformFee; }**

**public double calculateBeginnerInternFees() {**

**double typeFee;**

**switch (type) {**

**case "Technical":**

**typeFee = 100;**

**break;**

**case "Research":**

**typeFee = 200;**

**break;**

**case "Business":**

**typeFee = 300;**

**break;**

**default:**

**return -1; }**

**return certificationFee + platformFee + (typeFee \* noOfDays);}}**

**ADVANCED**

**public class BeginnerIntern extends Intern {**

**private int noOfDays;**

**private double platformFee;**

**public BeginnerIntern(String name, String emailId, String collegeName, String location, String type, double certificationFee, int noOfDays, double platformFee) {**

**super(name, emailId, collegeName, location, type, certificationFee);**

**this.noOfDays = noOfDays;**

**this.platformFee = platformFee; }**

**// Getters and Setters for noOfDays and platformFee**

**public int getNoOfDays() { return noOfDays; }**

**public void setNoOfDays(int noOfDays) { this.noOfDays = noOfDays; }**

**public double getPlatformFee() { return platformFee; }**

**public void setPlatformFee(double platformFee) { this.platformFee = platformFee; }**

**public double calculateBeginnerInternFees() {**

**double typeFee;**

**switch (type) {**

**case "Technical":**

**typeFee = 100;**

**break;**

**case "Research":**

**typeFee = 200;**

**break;**

**case "Business":**

**typeFee = 300;**

**break;**

**default:**

**return -1; }**

**return certificationFee + platformFee + (typeFee \* noOfDays);**

**}**

**}**