Program

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import java.util.Scanner;
interface accessories{
      String name[] = new String[100];
      int[] cost = new int[100];
      void discount(int cost[]);
}
class Product{
     String name[];
      int cost[];
      int len;
      protected static int totalcost = 0;
      Product(String[] name, int[] cost, int len) {
            for(int i=0;i<len;i++) {</pre>
            this.name[i] = name[i];
            for(int i=0;i<len;i++) {
            this.cost[i] = cost[i];
      void details(String name[], int cost[], int len){
            System.out.print("Customer Details\n");
            for(int i = 0; i < len; i++){</pre>
                  System.out.print("Name: " + this.name[i] + "\n");
                  System.out.print("Cost: " + this.cost[i] + "\n");
      int total(int[] cost, int len){
            for(int i=0;i<len;i++){</pre>
            totalcost += cost[i];
            return totalcost;
      void discount(int amt) {
            System.out.print("You are offered 10% discount. Amount to be
paid is " + String.valueOf(amt - amt*0.1));
      }
class Food extends Product{
      String name[];
      int cost[];
      int len;
      protected static int totalcost = 0;
      Food(String[] name, int[] cost, int len){
            for(int i=0;i<len;i++) {</pre>
            this.name[i] = name[i];
            for(int i=0;i<len;i++) {
            this.cost[i] = cost[i];
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void details(String name[], int cost[], int len){
            System.out.print("Customer Details\n");
            for (int i = 0; i < len; i++) {
                 System.out.print("Name: " + this.name[i] + "\n");
                 System.out.print("Cost: " + this.cost[i] + "\n");
      int total(int[] cost, int len){
            for(int i=0;i<len;i++) {
           totalcost += cost[i];
           return totalcost;
     void discount(int amt) {
            System.out.print("You are offered 10% discount. Amount to be
paid is " + String.valueOf(amt - amt*0.1));
      }
class Cosmetics extends Product{
     String name[];
     int cost[];
     int len;
     protected static int totalcost = 0;
     Cosmetics(String[] name, int[] cost, int len){
            for(int i=0;i<len;i++) {</pre>
           this.name[i] = name[i];
            for(int i=0;i<len;i++) {</pre>
            this.cost[i] = cost[i];
     void details(String name[], int cost[], int len){
            System.out.print("Customer Details\n");
            for(int i = 0; i < len; i++){}
                 System.out.print("Name: " + this.name[i] + "\n");
                 System.out.print("Cost: " + this.cost[i] + "\n");
      int total(int[] cost, int len){
            for(int i=0;i<len;i++) {</pre>
            totalcost += cost[i];
           return totalcost;
     void discount(int amt) {
           System.out.print("You are offered 10% discount. Amount to be
paid is " + String.valueOf(amt - amt*0.1));
}
class Toys extends Product {
     String name[];
     int cost[];
     int len;
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protected static int totalcost = 0;
      Toys(String[] name, int[] cost, int len){
           for(int i=0;i<len;i++) {</pre>
           this.name[i] = name[i];
           for(int i=0;i<len;i++){
           this.cost[i] = cost[i];
      void details(String name[], int cost[], int len){
           System.out.print("Customer Details\n");
           for (int i = 0; i < len; i++) {
                 System.out.print("Name: " + this.name[i] + "\n");
                 System.out.print("Cost: " + this.cost[i] + "\n");
      int total(int[] cost, int len){
           for(int i=0;i<len;i++) {</pre>
           totalcost += cost[i];
           return totalcost;
     void discount(int amt) {
           System.out.print("You are offered 10% discount. Amount to be
paid is " + String.valueOf(amt - amt*0.1));
}
public class Customer{
     public static void main(String... args) {
           Scanner sc = new Scanner(System.in);
           Product obj[] = new Product[10];
           Food obj1[] = new Food[10];
           Cosmetics obj2[] = new Cosmetics[10];
           Toys obj3 = new Toys[10];
           while(true){
                 System.out.print("1. Purchase\n2. Exit\nEnter your
choice: ");
                 int n = sc.nextInt();
                 if(n == 1){
                       System.out.print("Enter customer name: ");
                       String name = sc.next();
                       System.out.print("Enter the no of products to be
purchased: ");
                       int n1 = sc.nextInt();
                       int cost[] = new int[10];
                       String proname[] = new String[10];
                       int ct = 0;
                       for(int k = 0; k < n1; k++){
                             System.out.print("Enter product name: ");
                             proname[ct] = sc.next();
                             System.out.print("Enter cost ");
                             cost[ct] = sc.nextInt();
                       obj1[ct] = new Food(proname, cost, n1);
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obj1[ct].details(proname, cost, n1);
       }
}
Output
1. Purchase
2. Exit
Enter your choice: 1
Enter customerId: 1
Enter number of products purchased: 2
Name of the product: idly
Price: 20
Name of the product: toys
Price: 160
Product Details
Id: 1
Name: idly
Amount: 20
Name: toys
Amount: 160
Tracnsaction Details
Actual amount to be paid is Rs.180
You're offered with a 25% Discount. So that you can pay Rs.135.0

    Purchase

2. Exit
Enter your choice: 2
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