import java.util.Scanner;

import java.io.\*;

class Customer

{

long c\_id;

String c\_name;

byte c\_age;

long c\_phone;

String c\_address;

String c\_email;

char c\_gender;

String c\_dob;

String c\_joindate;

public void read()throws IOException

{

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

System.out.println("Enter the customer name:");

c\_name = br.readLine();

System.out.println("Enter customer id:");

c\_id = Long.parseLong(br.readLine());

System.out.println("Enter customer age:");

c\_age = Byte.parseByte(br.readLine());

System.out.println("Enter customer phone:");

c\_phone = Long.parseLong(br.readLine());

System.out.println("Enter customer address:");

c\_address = br.readLine();

System.out.println("Enter customer email:");

c\_email = br.readLine();

System.out.println("Enter customer gender:");

c\_gender = (char) br.read();

br.readLine();

System.out.println("Enter customer dob:");

c\_dob = br.readLine();

System.out.println("Enter customer joining date:");

c\_joindate = br.readLine();

}

public void display()

{

System.out.println("Name of the customer:" + c\_name);

System.out.println("Id of the customer:" + c\_id);

System.out.println("Age of the customer:" + c\_age);

System.out.println("Phone number of the customer:" + c\_phone);

System.out.println("Address of the customer:" + c\_address);

System.out.println("Email of the customer:" + c\_email);

System.out.println("Gender of the customer:" + c\_gender);

System.out.println("DOB of the customer:" + c\_dob);

System.out.println("Joining date of the customer:" + c\_joindate);

}

}

class Employee

{

long e\_id;

String e\_name;

byte e\_age;

long e\_phone;

String e\_address;

String e\_email;

char e\_gender;

String e\_dob;

String e\_joindate;

public void read()throws IOException

{

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

System.out.println("Enter the employee name:");

e\_name = br.readLine();

System.out.println("Enter employee id:");

e\_id = Long.parseLong(br.readLine());

System.out.println("Enter employee age:");

e\_age = Byte.parseByte(br.readLine());

System.out.println("Enter employee phone:");

e\_phone = Long.parseLong(br.readLine());

System.out.println("Enter employee address:");

e\_address = br.readLine();

System.out.println("Enter employee email:");

e\_email = br.readLine();

System.out.println("Enter employee gender:");

e\_gender = (char) br.read();

br.readLine();

System.out.println("Enter employee dob:");

e\_dob = br.readLine();

System.out.println("Enter employee joining date:");

e\_joindate = br.readLine();

}

public void display()

{

System.out.println("Name of the employee:" + e\_name);

System.out.println("Id of the employee:" + e\_id);

System.out.println("Age of the employee:" + e\_age);

System.out.println("Phone number of the employee:" + e\_phone);

System.out.println("Address of the employee:" + e\_address);

System.out.println("Email of the employee:" + e\_email);

System.out.println("Gender of the employee:" + e\_gender);

System.out.println("DOB of the employee:" + e\_dob);

System.out.println("Joining date of the employee:" + e\_joindate);

}

}

class Book\_details

{

long book\_id;

String book\_name;

String book\_author;

String store\_loc;

String shelf\_loc;

String book\_type;

int edition;

short publish\_date;

String pub\_name;

int price;

byte stock;

public void read()throws IOException

{

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

System.out.println("Enter the book name:");

book\_name = br.readLine();

System.out.println("Enter book id:");

book\_id = Long.parseLong(br.readLine());

System.out.println("Enter book author:");

book\_author = br.readLine();

System.out.println("Enter store location:");

store\_loc = br.readLine();

System.out.println("Enter shelf location:");

shelf\_loc = br.readLine();

System.out.println("Enter book type:");

book\_type = br.readLine();

System.out.println("Enter book edition:");

edition = (int) br.read();

System.out.println("Enter publish year:");

publish\_date = Short.parseShort(br.readLine());

System.out.println("Enter publisher name:");

pub\_name = br.readLine();

System.out.println("Enter price of book");

price = (int) br.read();

System.out.println("Enter stocks of book");

stock = Byte.parseByte(br.readLine());

}

public void display()

{

System.out.println("Name of the book:" + book\_name);

System.out.println("Id of the book:" + book\_id);

System.out.println("Author of the book:" + book\_author);

System.out.println("Store location:" + store\_loc);

System.out.println("Shelf location:" + shelf\_loc);

System.out.println("Book type:" + book\_type);

System.out.println("Edition:" + edition);

System.out.println("Publish year:" + publish\_date);

System.out.println("Publisher name:" + pub\_name);

System.out.println("Price of book:" + price);

System.out.println("Stocks of book left:" + stock);

}

}

class Storeinfo

{

store\_id, name, sub\_name, address, phone, email

long store\_id;

String store\_name;

String sub\_name;

String address;

int phone;

String email;

public void read()

{

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

System.out.println("Enter Store id:");

store\_id = Long.parseLong(br.readLine());

System.out.println("Enter Store name:");

store\_name = br.readLine();

System.out.println("Enter Sub name:");

sub\_name = br.readLine();

System.out.println("Enter address:");

address = br.readLine();

System.out.println("Enter phone number:");

phone = (int) br.read();

System.out.println("Enter Store email:");

email = br.readLine();

}

public void display()

{

System.out.println("Store id:" + store\_id);

System.out.println("Store name:" + store\_name);

System.out.println("Sub name:" + sub\_name);

System.out.println("Store address:" + address);

System.out.println("Store phone:" + phone);

System.out.println("Store email:" + email);

}

}

public class Ques1

{

public static void main(String []args)throws IOException

{

Customer obj\_cust = new Customer();

obj\_cust.read();

obj\_cust.display();

Employee obj\_emp = new Employee();

obj\_emp.read();

obj\_emp.display();

Book\_details obj\_books = new Book\_details();

obj\_books.read();

obj\_books.display();

}

}

Main.java

package com.mca;

public class Main {

public static void main(String[] args) {

Customer c = new Customer();

c.read();

c.disp();

}

}

public class Helper {

private static Helper ourInstance = null;

public static Helper getInstance() {

if (ourInstance == null)

return new Helper();

return ourInstance;

}

public Date convertToDate(String dateStr) {

Calendar greg = Calendar.getInstance();

greg.set(Integer.parseInt(dateStr.split(&quot;-&quot;)[2]),

Integer.parseInt(dateStr.split(&quot;-&quot;)[1]) - 1,

Integer.parseInt(dateStr.split(&quot;-&quot;)[0]));

return greg.getTime();

}

public DateFormat getDateFormat() {

return new SimpleDateFormat(&quot;yyyy, MMM dd, E&quot;);

}

}

class Person {

public String name;

public String address;

public String phone;

public String email;

public Byte age;

public Character gender;

public Date dob;

public Date fromDate;

}

CoWorking.java

package com.mca;

import java.util.Date;

class CoWorking {

public String picname;

public String address;

public String email;

public String phone;

public Date fromDate;

}

public class Cooperation extends CoWorking {

public Long coop\_id;

public String category;

public String name;

public Integer book\_id;

public Short price;

public void read() {

try {

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

System.out.println(&quot;Enter the cooperation information&quot;);

System.out.print(&quot;ID: &quot;);

coop\_id = Long.parseLong(br.readLine());

System.out.print(&quot;Category: &quot;);

category = br.readLine();

System.out.print(&quot;Company&#39;s name: &quot;);

name = br.readLine();

System.out.print(&quot;Contact name: &quot;);

picname = br.readLine();

System.out.print(&quot;Phone: &quot;);

phone = br.readLine();

System.out.print(&quot;Email: &quot;);

email = br.readLine();

System.out.print(&quot;Address: &quot;);

address = br.readLine();

fromDate = new Date();

} catch (Exception e) {

System.out.println(e);

}

}

public void disp() {

System.out.printf(&quot;\n\nCustomer Information\n&quot;);

System.out.println(&quot;ID : &quot; + coop\_id.toString());

System.out.println(&quot;Name : &quot; + category);

System.out.println(&quot;Age : &quot; + name);

System.out.println(&quot;Gender : &quot; + picname);

System.out.println(&quot;Phone : &quot; + phone);

System.out.println(&quot;Email : &quot; + email );

System.out.println(&quot;Address : &quot; + address);

System.out.println(&quot;Joining date : &quot; + Helper.getInstance().getDateFormat().format(fromDate));

}

}

public class Feedback {

public Integer fb\_id;

public String category;

public Date fb\_date;

public String phone;

public String contents;

public void read() {

try {

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

System.out.println(&quot;Enter the feedback information&quot;);

System.out.print(&quot;ID: &quot;);

fb\_id = Integer.parseInt(br.readLine());

System.out.print(&quot;Category: &quot;);

category = br.readLine();

System.out.println(&quot;Feedback date: (DD-MM-YYYY)&quot;);

fb\_date = Helper.getInstance().convertToDate(br.readLine());

System.out.print(&quot;Phone: &quot;);

phone = br.readLine();

System.out.print(&quot;Contents: &quot;);

contents = br.readLine();

} catch (Exception e) {

System.out.println(e);

}

}

public void disp() {

System.out.printf(&quot;\n\nFeedback Information\n&quot;);

System.out.println(&quot;ID : &quot; + fb\_id.toString());

System.out.println(&quot;Name : &quot; + category);

System.out.println(&quot;Feedback on: &quot; + Helper.getInstance().getDateFormat().format(fb\_date));

System.out.println(&quot;Phone : &quot; + phone);

System.out.println(&quot;Contents : &quot; + contents);

}

}

IssuedLog.java

package com.mca;

import java.io.BufferedReader;

import java.io.InputStreamReader;

import java.util.Date;

public class IssuedLog {

public Integer hist\_id;

public String type;

public Integer book\_id;

public Integer store\_id;

public Date issuedDate;

public Date returnedDate;

public void read() {

try {

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

System.out.println(&quot;Enter the issuing information&quot;);

System.out.print(&quot;ID: &quot;);

hist\_id = Integer.parseInt(br.readLine());

System.out.print(&quot;Type: &quot;);

type = br.readLine();

System.out.print(&quot;Book ID: &quot;);

book\_id = Integer.parseInt(br.readLine());

System.out.print(&quot;Store ID: &quot;);

store\_id = Integer.parseInt(br.readLine());

System.out.println(&quot;Date of Issue: (DD-MM-YYYY)&quot;);

issuedDate = Helper.getInstance().convertToDate(br.readLine());

System.out.println(&quot;Date of Return: (DD-MM-YYYY)&quot;);

returnedDate = Helper.getInstance().convertToDate(br.readLine());

} catch (Exception e) {

System.out.println(e);

}

}

public void disp() {

System.out.printf(&quot;\n\nIssuing Information\n&quot;);

System.out.println(&quot;ID : &quot; + hist\_id.toString());

System.out.println(&quot;Type : &quot; + type);

System.out.println(&quot;Book ID : &quot; + book\_id.toString());

System.out.println(&quot;Store ID : &quot; + store\_id.toString());

System.out.println(&quot;Issued on : &quot; + Helper.getInstance().getDateFormat().format(issuedDate));

System.out.println(&quot;Returned on : &quot; + Helper.getInstance().getDateFormat().format(returnedDate));

}

}

public class Promotion {

public Integer promo\_id;

public String name;

public Date startDate;

public Date endDate;

public Integer cid;

public String book\_type;

public void read() {

try {

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

System.out.println(&quot;Enter the promotion information&quot;);

System.out.print(&quot;ID: &quot;);

promo\_id = Integer.parseInt(br.readLine());

System.out.print(&quot;Campaign&#39;s name: &quot;);

name = br.readLine();

System.out.println(&quot;Start date: (DD-MM-YYYY)&quot;);

startDate = Helper.getInstance().convertToDate(br.readLine());

System.out.println(&quot;End date: (DD-MM-YYYY)&quot;);

endDate = Helper.getInstance().convertToDate(br.readLine());

System.out.print(&quot;Offer to customer ID: &quot;);

cid = Integer.parseInt(br.readLine());

System.out.print(&quot;Book type: &quot;);

book\_type = br.readLine();

} catch (Exception e) {

System.out.println(e);

}

}

public void disp() {

System.out.printf(&quot;\n\nWarehouse Information\n&quot;);

System.out.println(&quot;ID : &quot; + promo\_id.toString());

System.out.println(&quot;Campaign&#39;s name : &quot; + name);

System.out.println(&quot;Start from : &quot; + Helper.getInstance().getDateFormat().format(startDate));

System.out.println(&quot;End at : &quot; + Helper.getInstance().getDateFormat().format(endDate));

System.out.println(&quot;Offer to : &quot; + cid.toString());

System.out.println(&quot;Type : &quot; + book\_type);

}

}

public class Request {

public Integer req\_id;

public String book\_name;

public String author;

public String publisher;

public String type;

public Byte edition;

public String phone;

public void read() {

try {

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

System.out.println(&quot;Enter the request information&quot;);

System.out.print(&quot;ID: &quot;);

req\_id = Integer.parseInt(br.readLine());

System.out.print(&quot;Book&#39;s name: &quot;);

book\_name = br.readLine();

System.out.print(&quot;Author: &quot;);

author = br.readLine();

System.out.print(&quot;Publisher: &quot;);

publisher = br.readLine();

System.out.print(&quot;Book&#39;s type: &quot;);

type = br.readLine();

System.out.println(&quot;Book&#39;s edition: &quot;);

edition = Byte.parseByte(br.readLine());

System.out.print(&quot;Phone: &quot;);

phone = br.readLine();

} catch (Exception e) {

System.out.println(e);

}

}

public void disp() {

System.out.printf(&quot;\n\nRequest Information\n&quot;);

System.out.println(&quot;ID : &quot; + req\_id.toString());

System.out.println(&quot;Book&#39;s name : &quot; + book\_name);

System.out.println(&quot;Author : &quot; + author);

System.out.println(&quot;Publisher : &quot; + publisher);

System.out.println(&quot;Type : &quot; + type);

System.out.println(&quot;Edition : &quot; + edition.toString() );

System.out.println(&quot;Phone : &quot; + phone);

}

}

public class Sells {

public Long trans\_id;

public Integer book\_id;

public Integer sold\_to;

public Date sold\_date;

public Integer price;

public String store;

public void read() {

try {

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

System.out.println(&quot;Enter the sells information&quot;);

System.out.print(&quot;ID: &quot;);

trans\_id = Long.parseLong(br.readLine());

System.out.print(&quot;Book ID: &quot;);

book\_id = Integer.parseInt(br.readLine());

System.out.print(&quot;Sold to (ID): &quot;);

sold\_to = Integer.parseInt(br.readLine());

System.out.println(&quot;Date: (DD-MM-YYYY)&quot;);

sold\_date = Helper.getInstance().convertToDate(br.readLine());

System.out.print(&quot;Price: &quot;);

price = Integer.parseInt(br.readLine());

System.out.print(&quot;Store: &quot;);

store = br.readLine();

} catch (Exception e) {

System.out.println(e);

}

}

public void disp() {

System.out.printf(&quot;\n\nSells Information\n&quot;);

System.out.println(&quot;ID : &quot; + trans\_id.toString());

System.out.println(&quot;Book ID : &quot; + book\_id.toString());

System.out.println(&quot;Sold to : &quot; + sold\_to.toString());

System.out.println(&quot;Date : &quot; + Helper.getInstance().getDateFormat().format(sold\_date));

System.out.println(&quot;Price : &quot; + price.toString());

System.out.println(&quot;Store : &quot; + store );

}

}

public class Supplier extends CoWorking {

public Integer sup\_id;

public String name;

public Byte tier;

public void read() {

try {

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

System.out.println(&quot;Enter the supplier information&quot;);

System.out.print(&quot;ID: &quot;);

sup\_id = Integer.parseInt(br.readLine());

System.out.print(&quot;Supplier&#39;s name: &quot;);

name = br.readLine();

System.out.print(&quot;Supplier&#39;s tier: &quot;);

tier = Byte.parseByte(br.readLine());

System.out.print(&quot;Coordinator&#39;s name: &quot;);

picname = br.readLine();

System.out.print(&quot;Phone: &quot;);

phone = br.readLine();

System.out.print(&quot;Email: &quot;);

email = br.readLine();

System.out.print(&quot;Address: &quot;);

address = br.readLine();

fromDate = new Date();

} catch (Exception e) {

System.out.println(e);

}

}

public void disp() {

System.out.printf(&quot;\n\nSupplier Information\n&quot;);

System.out.println(&quot;ID : &quot; + sup\_id.toString());

System.out.println(&quot;Name : &quot; + name);

System.out.println(&quot;Tier : &quot; + tier.toString());

System.out.println(&quot;Phone : &quot; + phone);

System.out.println(&quot;Email : &quot; + email );

System.out.println(&quot;Address : &quot; + address);

System.out.println(&quot;Since : &quot; + Helper.getInstance().getDateFormat().format(fromDate));

}

}

public class Warehouse extends CoWorking {

public Integer wh\_id;

public String warehouse\_name;

public void read() {

try {

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

System.out.println(&quot;Enter the warehouse information&quot;);

System.out.print(&quot;ID: &quot;);

wh\_id = Integer.parseInt(br.readLine());

System.out.print(&quot;Warehouse&#39;s name: &quot;);

warehouse\_name = br.readLine();

System.out.print(&quot;Coordinator&#39;s name: &quot;);

picname = br.readLine();

System.out.print(&quot;Phone: &quot;);

phone = br.readLine();

System.out.print(&quot;Email: &quot;);

email = br.readLine();

System.out.print(&quot;Address: &quot;);

address = br.readLine();

} catch (Exception e) {

System.out.println(e);

}

}

public void disp() {

System.out.printf(&quot;\n\nWarehouse Information\n&quot;);

System.out.println(&quot;ID : &quot; + wh\_id.toString());

System.out.println(&quot;Name : &quot; + warehouse\_name);

System.out.println(&quot;Coordinator : &quot; + picname);

System.out.println(&quot;Phone : &quot; + phone);

System.out.println(&quot;Email : &quot; + email );

System.out.println(&quot;Address : &quot; + address);

}

}