```java
class fullTimeEmployee
{
private String firstName;
private String lastName;
private String empId;
private double payRate;
private double hoursWorked;
public fullTimeEmployee(String fn,String ln, String id, double rate, double hrs)
{
firstName=fn;
lastName=ln;
empId=id;
payRate=rate;
hoursWorked=hrs;
}

public String getFirstName()
{
return firstName;
}

public String getLastName()
{
return lastName;
}

public String getId()
{
return empId;
}

public double getPayrate()
{
return payRate;
}

public double getHrsWork()
{
return hoursWorked;
}
public double calculatePay()
{
return(payRate*hoursWorked);
}
}
```

```java
public class casualEmployee extends fullTimeEmployee
{
private String type;

public casualEmployee(String firstName,String lastName,String emptId, double
payRate, double hoursWorked,String t)
{
super (firstName,lastName, emptId, payRate, hoursWorked);
type=t;
}

public String getEmpType()
{return "Employment type:\t"+type;}
}
```

```java
//Name: Chumnap Thach
//Function: Calculate payroll
//Date: 25, may, 2005

import java.io.*;
class test
{
static BufferedReader kb=new BufferedReader(new InputStreamReader(System.in));

//=================Main method==========================
public static void main(String [] args) throws IOException
{
int num=0; char cont;
do{
do
{
menu();
num = Integer.parseInt(kb.readLine());
switch(num)
{
case 1:
enterDetail();
break;

case 2:
readList();
break;

case 3:
break;
default: System.out.print("out of range..");
}//end switch
}while(num !=3);//end do
System.out.print("Are you sure you want to exit? (y/n): ");
String s=kb.readLine();
cont=s.charAt(0);
}while(cont !='y');
}//end main



//===========MENU========
public static void menu()
{
System.out.println("\n\t\t---------------------------------");
System.out.println("\t\t\tEMPLOYEE PAY SYSTEM..");
System.out.println("\t\t---------------------------------");
System.out.println();
System.out.println("\t\t1.\tCalculate employee pay");
System.out.println("\t\t2.\tPrint employee list");
System.out.println("\t\t3.\tExit");
}

//=====================================================
public static void enterDetail() throws IOException
{
int fullTimeNo=2;
int casualNo=2;
int noOfEmployee=fullTimeNo+casualNo;
//public double hoursWorked=0;
String []fname= new String[noOfEmployee];
String []lname= new String[noOfEmployee];
String []id=new String[noOfEmployee];
String []type= new String[noOfEmployee];
double []rate =new double[noOfEmployee];
double []hrs=new double[noOfEmployee];
double []pay=new double[noOfEmployee];


fullTimeEmployee []fm= new fullTimeEmployee[noOfEmployee];

//---------ENTER FULL TIME EMPLOYEE DETAIL--------------------

System.out.print("Please enter employment type: ");
System.out.print("'F' for \"full time\", 'C' for \"Casual\"");
char empType = kb.readLine().charAt(0);
switch(empType)
{
case 'f':
case 'F':

System.out.print("Please enter full time pay rate:\t");
double payRate=Double.parseDouble(kb.readLine());

for(int i=0;i<fullTimeNo;i++)
{
System.out.print(i+". First name:\t");
String firstName=kb.readLine();

System.out.print(i+". Last name:\t");
String lastName=kb.readLine();

System.out.print(i+". Id number :\t");
String empId=kb.readLine();
System.out.println();

System.out.println("\n\t\tPlease enter hours worked");

System.out.print("\t\tMonday:\t\t");
double Monday=Double.parseDouble(kb.readLine());

System.out.print("\t\tTuesday:\t");
double Tuesday=Double.parseDouble(kb.readLine());

System.out.print("\t\tWednesday:\t");
double Wednesday=Double.parseDouble(kb.readLine());

System.out.print("\t\tThursdy:\t");
double Thursday=Double.parseDouble(kb.readLine());

System.out.print("\t\tFriday:\t\t");
double Friday=Double.parseDouble(kb.readLine());

double hoursWorked=Monday+Tuesday+Wednesday+Thursday+Friday;
System.out.println("\t\tHours worked:\t"+hoursWorked);

//Constructor
fm[i]=new fullTimeEmployee(firstName, lastName, empId, payRate, hoursWorked);

System.out.println("You was enter detail as below:");
fullTimeEmployee f=fm[i];
System.out.println(i+". First name:\t"+f.getFirstName());
System.out.println(i+". Last name:\t"+f.getLastName());
System.out.println(i+". Gross pay:\t"+f.calculatePay());

fname[i]=firstName;
lname[i]=lastName;
id[i]=empId;
type[i]= "Full time";
rate[i]=payRate;
hrs[i]=hoursWorked;
pay[i]=payRate*hoursWorked;
}//end for

//==============
try{
PrintWriter pw=new PrintWriter(new FileWriter("payslip.txt"));
for(int i=0;i<fullTimeNo;i++)
{
pw.print("First name:\t");
pw.println(fname[i]);
pw.print("Last name:\t");
pw.println(lname[i]);
pw.print("Id number:\t");
pw.println(id[i]);
pw.println("Employment type:\t"+type[i]);
pw.println("Pay rate\t"+rate[i]);
pw.println("Hours Worked\t"+hrs[i]);
pw.println("Gross pay:\t"+pay[i]);
pw.println(); //seperate each employee
// System.out.print(lname[i]);
}
pw.close();
System.out.println("Payslip has been write to payslip.txt");
}
catch(IOException e)
{
System.out.print("File writing errors");
}
//==================
PrintWriter pw2=new PrintWriter(new FileWriter("list.txt"));
for(int i=0;i<fullTimeNo;i++)
{
pw2.print(fname[i]);
pw2.print("\t");
pw2.println(lname[i]);
}
pw2.close();


break;

case 'c':
case 'C':
//-------Enter casual employee details-------------------
System.out.println("\n\tPLEASE ENTER CASUAL EMPLOYEE DETAIL");
System.out.print("Please enter Casual pay rate:\t");
payRate=Double.parseDouble(kb.readLine());


for(int i=fullTimeNo;i<fm.length;i++)
{
System.out.print(i+". First name:\t");
String firstName=kb.readLine();

System.out.print(i+". Last name:\t");
String lastName=kb.readLine();

System.out.print(i+". Id number:\t");
String empId=kb.readLine();


double hoursWorked;
System.out.println("\n\t\tPlease enter hours worked");
System.out.print("\t\tMonday:\t\t");
double Monday=Double.parseDouble(kb.readLine());
//hoursWorked=Monday;

System.out.print("\t\tTuesday:\t");
double Tuesday=Double.parseDouble(kb.readLine());

System.out.print("\t\tWednesday:\t");
double Wednesday=Double.parseDouble(kb.readLine());

System.out.print("\t\tThursdy:\t");
double Thursday=Double.parseDouble(kb.readLine());

System.out.print("\t\tFriday:\t\t");
double Friday=Double.parseDouble(kb.readLine());

hoursWorked=Monday+Tuesday+Wednesday+Thursday+Friday;
System.out.println("Hours work\t"+hoursWorked);


casualEmployee cs=new casualEmployee(firstName, lastName,empId, payRate,hoursWorked,"Casual");
fm[i]=cs;
casualEmployee c=cs;
System.out.println(c.getEmpType());
System.out.println();
fname[i]=firstName;
lname[i]=lastName;
id[i]=empId;
type[i]="Casual";
rate[i]=payRate;
hrs[i]=hoursWorked;
pay[i]=payRate*hoursWorked;
}

//=====================
PrintWriter p=new PrintWriter(new FileWriter("payslip.txt"));
for(int i=fullTimeNo;i<fm.length;i++)
{
p.print("First name:\t");
p.println(fname[i]);
p.print("Last name:\t");
p.println(lname[i]);
p.print("Id number:\t");
p.println(id[i]);
p.println("Employment type:\t"+type[i]);
p.println("Pay rate\t"+rate[i]);
p.println("Hours Worked\t"+hrs[i]);
p.println("Gross pay:\t"+pay[i]);
p.println(); //seperate each employee
// System.out.print(lname[i]);
}
p.close();
System.out.println("Payslip has been write to payslip.txt");

PrintWriter p2=new PrintWriter(new FileWriter("list.txt"));
for(int i=fullTimeNo;i<fm.length;i++)
{
p2.print(fname[i]);
p2.print("\t");
p2.println(lname[i]);
}
p2.close();

break;
default: System.out.print("Please enter C or F");

}

}//enterDetail?


//================Read payslip==================
public static void readList()throws IOException
{
FileReader fr=new FileReader("list.txt");
BufferedReader rf=new BufferedReader(fr);
boolean eof=false;
while(!eof)
{
String line=rf.readLine();
if(line==null)
eof=true;
else
System.out.println(line);
}rf.close();
}

}//end class
```