Create an class **Employee** with following properties and functions

**Properties:**

int empId

String empName

int total\_leaves

double total\_salary

**Methods:**

void calculate\_balance\_leaves();

boolean avail\_leave(int no\_of\_leaves, char type\_of\_leave);

void calculate\_salary();

Create two subclasses PermanentEmp and TemporaryEmp that efollowing properties and functions

**PermanentEmp**

**Properties:**

int paid\_leave, sick\_leave, casual\_leave

double basic, hra,pfa

**Methods:**

void print\_leave\_details()

override void calculate\_balance\_leaves()

override boolean avail\_leave(int no\_of\_leaves, char type\_of\_leave)

override void calculate\_salary()

**TemporaryEmp**

**No new properties**

**Methods:**

override void calculate\_balance\_leaves()

override boolean avail\_leave(int no\_of\_leaves, char type\_of\_leave)

override void calculate\_salary()

**6. Expected Output**

Write a program that will compute an Employee's salary and man

**Note:**

**Pf = 12% of basic**

**hra = 50% of basic**

**total\_sal = basic + hra – pf**

Program:

PermanentEmp.java

**public** **class** PermanentEmp **extends** Employee{

**int** paid\_leave = 10, sick\_leave=6, casual\_leave=4 ;

**double** basic=10000, hra,pfa,total\_sal ;

**int** total\_leave,new\_leave;

**void** print\_leave\_details(){

System.***out***.println("Leave details");

System.***out***.println("paid\_leaves : " +paid\_leave);

System.***out***.println("sick\_leave : " +sick\_leave);

System.***out***.println("casual\_leave : " +casual\_leave);

}

**void** calculate\_balance\_leaves(){

total\_leave = paid\_leave+sick\_leave+casual\_leave;

System.***out***.println("Total leaves remaining = " + total\_leave);

}

**boolean** avail\_leave(**int** no\_of\_leaves, **char** type\_of\_leave){

**switch**(type\_of\_leave)

{

**case** 'A' :**if** (no\_of\_leaves<=paid\_leave){

paid\_leave = paid\_leave-no\_of\_leaves ;

**return** **true**;

}

**case** 'B':**if** (no\_of\_leaves<=sick\_leave){

sick\_leave = sick\_leave-no\_of\_leaves;

**return** **true**;

}

**case** 'C':**if** (no\_of\_leaves<=casual\_leave){

casual\_leave = casual\_leave-no\_of\_leaves;

**return** **true**;

}

}

**return** **false**;

}

**void** calculate\_salary(){

pfa = 0.12\*basic;

System.***out***.println("pfa " + pfa);

hra = 0.50\*basic;

System.***out***.println("hra " + hra);

**double** diff= hra-pfa;

total\_sal=basic+diff;

System.***out***.println("total salary" + total\_sal);

}

}

Employee.java

**abstract** **class** Employee {

**int** empId;

String empName;

**int** total\_leaves;

**double** total\_salary;

**abstract** **void** calculate\_balance\_leaves();

**abstract** **boolean** avail\_leave(**int** no\_of\_leaves, **char** type\_of\_leave);

**abstract** **void** calculate\_salary();

}

Assignment.java

**import** java.util.Scanner;

**public** **class** Assignment {

**public** **static** **void** main(String[] args) {

PermanentEmp p1= **new** PermanentEmp();

TemporaryEmp t1= **new** TemporaryEmp();

Scanner input= **new** Scanner(System.***in***);

System.***out***.println("Press 1 for permanent employee . 2 for Temporary employee" );

**int** choice= input.nextInt();

**switch**(choice)

{

**case** 1:

System.***out***.println("Enter no of days to apply for leave: " );

**int** n1= input.nextInt();

System.***out***.println("Enter type of leave: A.paid leave B.sick leave C. casual leave " );

**char** n2 = input.next().charAt(0);

**if** (p1.avail\_leave(n1,n2)){

System.***out***.println("\*\*\*\*Leave applied\*\*\*\*" );

p1.calculate\_balance\_leaves();

}

**else** System.***out***.println("\*\*\*\*\*Leaves not sufficient\*\*\*\*");

System.***out***.println();

System.***out***.println("Salary details : ");

p1.calculate\_salary();

**break**;

**case** 2:

System.***out***.println("Enter no of days to apply for leave: " );

**int** n3= input.nextInt();

System.***out***.println("Enter type of leave: A.paid leave B.sick leave C. casual leave " );

**char** n4 = input.next().charAt(0);

**if** (t1.avail\_leave(n3,n4)){

System.***out***.println("\*\*\*\*\*\*Leave applied\*\*\*\*\*" );

t1.calculate\_balance\_leaves();

}

**else** System.***out***.println("\*\*\*\*\*Leaves not sufficient\*\*\*\*");

System.***out***.println();

System.***out***.println("Salary details : ");

t1.calculate\_salary();

**break**;

}

}

}

Temporary.java

**public** **class** TemporaryEmp **extends** Employee{

**int** paid\_leave = 8, sick\_leave=4, casual\_leave=2 ;

**double** basic=8000, hra,pfa,total\_sal ;

**int** total\_leave;

**int** new\_leave;

**void** print\_leave\_details(){

System.***out***.println("Leave details");

System.***out***.println("paid\_leaves : " +paid\_leave);

System.***out***.println("sick\_leave : " +sick\_leave);

System.***out***.println("casual\_leave : " +casual\_leave);

}

**void** calculate\_balance\_leaves(){

total\_leave = paid\_leave+sick\_leave+casual\_leave;

System.***out***.println("Total leaves remaining = " + total\_leave);

}

**boolean** avail\_leave(**int** no\_of\_leaves, **char** type\_of\_leave){

**switch**(type\_of\_leave)

{

**case** 'A' :**if** (no\_of\_leaves<=paid\_leave){

paid\_leave = paid\_leave-no\_of\_leaves ;

**return** **true**;

}

**case** 'B':**if** (no\_of\_leaves<=sick\_leave){

sick\_leave = sick\_leave-no\_of\_leaves;

**return** **true**;

}

**case** 'C':**if** (no\_of\_leaves<=casual\_leave){

casual\_leave = casual\_leave-no\_of\_leaves;

**return** **true**;

}

}

**return** **false**;

}

**void** calculate\_salary(){

pfa = 0.12\*basic;

System.***out***.println("pfa " + pfa);

hra = 0.50\*basic;

System.***out***.println("hra " + hra);

**double** diff= hra-pfa;

total\_sal=basic+diff;

System.***out***.println("total salary" + total\_sal);

}

}