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**Class: BSCS 2nd-Year (Morning)**

**Section: A**

**Object-Oriented Programming**

**(Assignment 5)**

**Object:** Create an application using inheritance to create the following performances + functionality:

1) Fee Collection of Student.

2) Attendance of Teachers.

3) Payroll/Salary

Display complete salary of at least 5 employee

Display total fees to be paid by 5 students.

**Class Program.cs**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApplication90

{

class Program

{

static void Main(string[] args)

{

choice();

Console.ReadKey();

}

public static void choice()

{

Console.WriteLine("1) Attendence of Teachers");

Console.WriteLine("2) Fee Collection of students");

Console.WriteLine("3)Exit ");

Console.WriteLine("Enter choice (1-3)");

int ch = 0;

ch = int.Parse(Console.ReadLine());

switch (ch)

{

case 1:

teachr();

break;

case 2:

studnt();

break;

case 3:

Environment.Exit(0);

break;

}

Console.WriteLine("\nPress any key to Continue");

Console.ReadKey();

choice();

}

public static void studnt()

{

int s = 1;

Console.WriteLine("Student No." + s++ + ":\n");

studentMain s1 = new studentMain(" Ahmed", " 459-2", " XII", " Science", 3500, " April");

Console.WriteLine("\nStudent # " + s++ + ":\n");

studentMain s2 = new studentMain(" Ahmed", " 459-2", " XII", " Science", 3500, " April");

Console.WriteLine("\nStudent # " + s++ + ":\n");

studentMain s3 = new studentMain(" Ahmed", " 459-2", " XII", " Science", 3500, " April");

Console.WriteLine("\nStudent # " + s++ + ":\n");

studentMain s4 = new studentMain(" Ahmed", " 459-2", " XII", " Science", 3500, " April");

Console.WriteLine("\nStudent # " + s++ + ":\n");

studentMain s5 = new studentMain(" Ahmed", " 459-2", " XII", " Science", 3500, " April");

}

public static void teachr()

{

int n = 1;

Console.WriteLine(" Teacher No. " + n++ + ":\n");

Teachermainclass t1 = new Teachermainclass( "April", " Teacher A", " Permanent", " 1234-567", 50000, 3, 20);

Console.WriteLine("\n Teacher No. " + n++ + ":\n");

Teachermainclass t2 = new Teachermainclass(" April", " Teacher B", " Permanent", " 1234-567", 50000, 3, 20);

Console.WriteLine("\n Teacher No. " + n++ + ":\n");

Teachermainclass t3 = new Teachermainclass(" April", " Teacher C", " Permanent", " 1234-567", 50000, 3, 20);

Console.WriteLine("\n Teacher No. " + n++ + ":\n");

Teachermainclass t4 = new Teachermainclass(" April", " Teacher D", " Permanent", " 1234-567", 50000, 3, 20);

Console.WriteLine("\n Teacher No. " + n++ + ":\n");

Teachermainclass t5 = new Teachermainclass(" April", " Teacher E", "Permanent", " 1234-567", 50000, 3, 20);

}

}

}

**Class studentfeesrules.cs**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApplication90

{

class studentfeesrules

{

public const double Monthlyfees = 3000;

public const double securitydeposit = 2000;

public double totalamountfees()

{

double totalamount = Monthlyfees + securitydeposit;

return totalamount;

}

public double RemAmount(double paidAmount)

{

return (totalamountfees() - paidAmount);

}

}

}

**Class studentmain.cs**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApplication90

{

class studentMain : studentfeesrules

{

public string studentname;

public string admissionkey;

public string studentclass;

public string studentgroup;

public double amountpaid;

public string month;

public studentMain(string studname,string admkey,string studclass,string studgrp,double feespaid,string mon)

{

studentname= studname;

admissionkey=admkey;

studentclass=studclass;

studentgroup=studgrp;

amountpaid=feespaid;

month=mon;

double totalfeesformonth=totalamountfees();

double balance=RemAmount(amountpaid);

Console.WriteLine("Student Name" + studentname);

Console.WriteLine("Admission key" + admissionkey);

Console.WriteLine("Class " + studentclass);

Console.WriteLine("Student Group/Section" + studentgroup);

Console.WriteLine("Total Fees for Month" +month+ "include sec. deposit (" + securitydeposit.ToString("F")+ "): "+totalfeesformonth);

Console.WriteLine("Fees paid: " + amountpaid.ToString("F"));

Console.WriteLine("Balance " + balance.ToString("F"));

Console.WriteLine("\n");

}

}

}

**Class Teachermainclass.cs**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApplication90

{

class Teachermainclass:teachersalaryrules

{

public string month = "April";

public string teachername="Teacher A";

public string status = "Permanent Faculty";

public string accountNum = "1234-5678-2589";

public double basicsalary = 50000;

public int latecounting = 7;

public int noOfdayspresent = 26;

public double TotalSalaryForAMonth(int late, int presentDays, double salary)

{

double unitsalarycalculate = unitSalaryCalculatedMethod(salary);

double totalsalarymonth = calcLateLateSalary(unitsalarycalculate, latecounting, noOfdayspresent);

return totalsalarymonth;

}

public Teachermainclass(string mon, string teachname, string stat, string acc, double Basicsalary, int latecount, int presentdays)

{

month = mon;

teachername = teachname;

status = stat;

accountNum = acc;

basicsalary = Basicsalary;

latecounting = latecount;

noOfdayspresent = presentdays;

Console.WriteLine("Month:\t\t\t\t" + month);

Console.WriteLine("TeacerhName: \t\t\t\t" + teachname);

Console.WriteLine("Status: \t\t\t\t" + status);

Console.WriteLine("Account #: \t\t\t\t" + accountNum);

Console.WriteLine("Basuc Sakart: \t\t\t\t" + basicsalary);

Console.WriteLine("Late Counting: \t\t\t\t" + latecounting);

Console.WriteLine("No. of Days Present: \t\t\t\t" + noOfdayspresent);

Console.WriteLine("Total salary of the Month out of" + SalaryCalculatedTotalDays + '\t');

TotalSalaryForAMonth(latecount, presentdays, basicsalary).ToString("F");

}

}

}

**Class teachersalaryrules.cs**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApplication90

{

class teachersalaryrules

{

public const double unitSalary = 0.10;

public const double lateAtt = 0.75;

public const int SalaryCalculatedTotalDays = 26;

public double calcLateLateSalary(double salaryAfterUnitSalary, int daysLate, int noOfDaysPres) {

int DayRules = SalaryCalculatedTotalDays;

double salaryPerDay = salaryAfterUnitSalary / DayRules;

double lateAttendancePolicy = lateAtt;

double salPerDayCalculated = salaryPerDay \* lateAttendancePolicy;

double SalaryAfterLate = salaryAfterUnitSalary - (salPerDayCalculated \* daysLate);

double SalaryTotal = SalaryAfterLate - ((DayRules - noOfDaysPres) \* salaryPerDay);

return SalaryTotal;

}

public double unitSalaryCalculatedMethod(double BasicSalary)

{

double unitSalaryy = unitSalary;

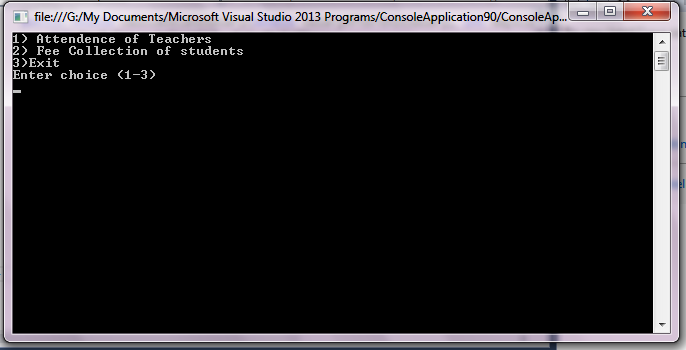
double TotalBasicSalary = BasicSalary \* unitSalaryy;

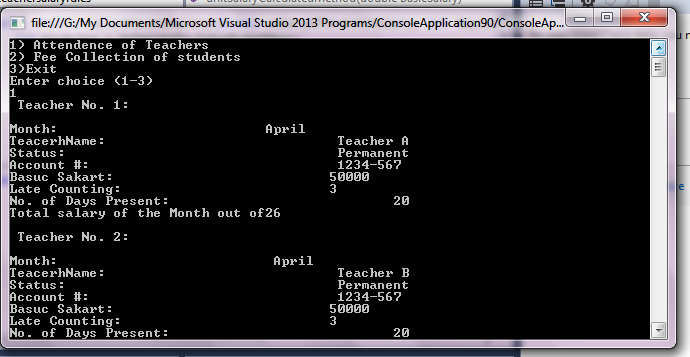
return TotalBasicSalary;

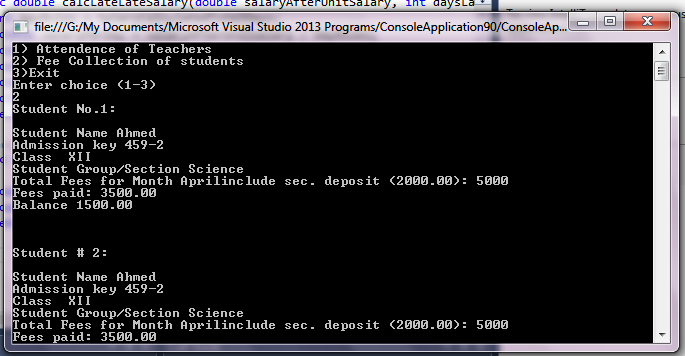
}

}

}

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