JAVA PROGRAMMING
(CSE1007)

LAB ASSIGNMENT -1

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SCENARIO – I

1. Get the n students information student name ,reg no, m1,m2,m3 find the total and average and then print the result of each student

i. **If student marks above 50 and avg above 50 the he is pass ((print the AVERAGE)**

ii. **If the student avg above 50 to 60 then he second class**

iii. **If the student avg above 60 to 75 then he first class**

iv. **If the student avg above 75 then he is Distinction**

SOURCE CODE-

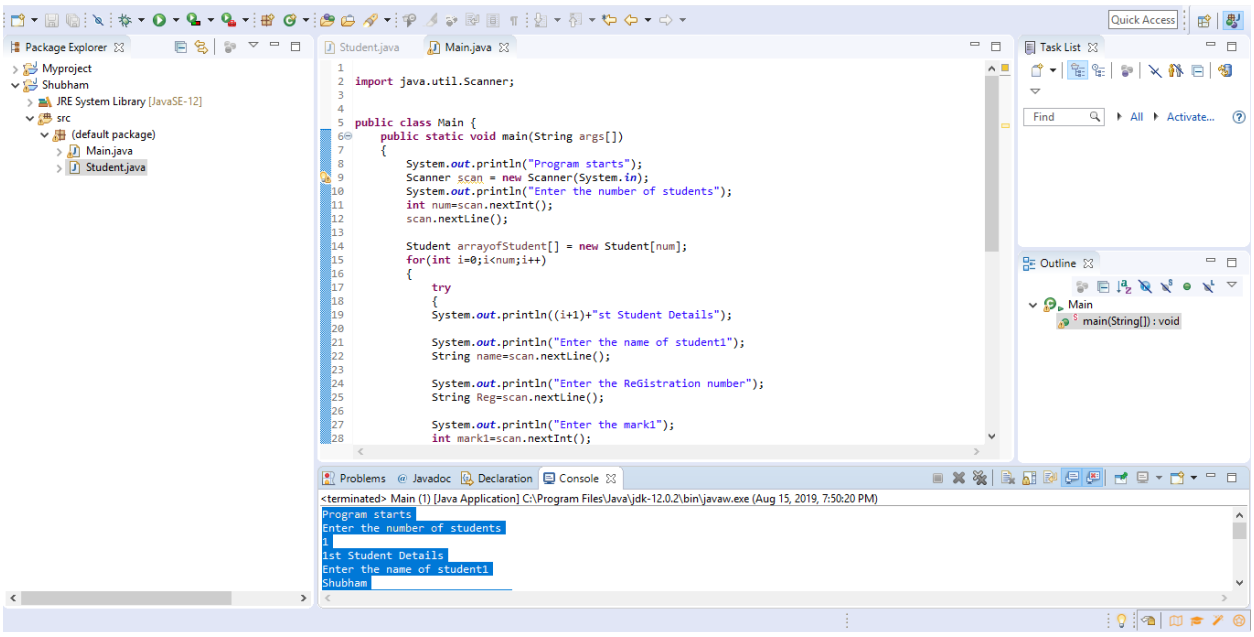
```
public class Student {
	private String name;
	private int marks1;
	private int marks2;
	private int marks3;
	private String regNo;

	public void intialize(String n,String reg,int marks1,int marks2,int
marks3)
	{
		this.name=n;
		this.marks1=marks1;
		this.regNo=reg;
		this.marks2=marks2;
		this.marks3=marks3;
	}
```

```
	public void display()
	{
		System.out.println(this.name);
		System.out.println(this.marks1);
		System.out.println(this.regNo);

	}

	public void average()
	{
		int average= (this.marks1+this.marks2+this.marks3)/3;
		System.out.println(average);
	}

}


import java.util.Scanner;


public class Main1 {
	public static void main(String args[])
	{
		System.out.println("Program starts");
		Scanner scan = new Scanner(System.in);
		System.out.println("Enter the number of students");
		int num=scan.nextInt();
		scan.nextLine();

		Student arrayofStudent[] = new Student[num];
		for(int i=0;i<num;i++)
		{
			try
			{
			System.out.println((i+1)+"st Student Details");

			System.out.println("Enter the name of student1");
```

```
                String name=scan.nextLine();

                System.out.println("Enter the ReGistration number");
                String Reg=scan.nextLine();

                System.out.println("Enter the mark1");
                int mark1=scan.nextInt();

                System.out.println("Enter the marks2");
                int mark2=scan.nextInt();

                System.out.println("Enter the mark3");
                int mark3=scan.nextInt();

                arrayofStudent[0]=new
Student(name,Reg,mark1,mark2,mark3);

                }
                catch(NullPointerException e)
                {
                        System.out.println("Error");
                        System.out.println(e);
                }


        }

        for(int i=0;i<num;i++)
        {
                arrayofStudent[i].display();
                arrayofStudent[i].average();
        }
    }

}
```

OUTPUT:

Program starts
Enter the number of students
1
1st Student Details
Enter the name of student1
MATHEW JERRY MELETH
Enter the ReGistration number
17BIT0050
Enter the mark1
100
Enter the marks2
90
Enter the mark3
99
Mathew
100
17bit0050
96



SCENARIO – II

Develop a java application with Employee class with Emp_name, Emp_id, Address, Mail_id, Mobile_no as members. Inherit the classes, Programmer, Assistant Professor, AssociateProfessor and Professor from employee class. Add Basic Pay (BP) as the member of all the inherited classes with 97% of BP as DA, 10 % of BP as HRA, 12% of BP as PF, 0.1% of BP for staff club fund. Generate pay slips for the employees with their gross and net salary.

CODE-

```
public class Employee{
        String name;
        int emp_id;
        String address;
        String email_id;
        int mobile_no;

public Employee(String n, int e_id, String addr, String email, int phn){
        this.name = n;
        this.emp_id = e_id;
        this.address = addr;
        this.email_id = email;
        this.mobile_no = phn;
}




}
```

```
public class Programmer extends Employee{
	int basic_pay;
	public Programmer(String n, int e_id, String addr, String email, int
phn, int bp) {
		super(n, e_id, addr, email, phn);
		this.basic_pay = bp;
	}

	public void calculate(){
		double da = (0.97)*basic_pay;
		double hra = (0.10)*basic_pay;
		double pf = (0.12)*basic_pay;
		double scf = (0.001)*basic_pay;
		double salary = basic_pay + da + hra + pf + scf;
		System.out.println("Salary is"+ salary);
	}

}


public class Assistant_professor extends Employee{
	int basic_pay;
	public Assistant_professor(String n, int e_id, String addr, String email,
			int phn, int bp) {
		super(n, e_id, addr, email, phn);
		this.basic_pay = bp;
	}

	public void calculate(){
		double da = (0.97)*basic_pay;
		double hra = (0.10)*basic_pay;
		double pf = (0.12)*basic_pay;
		double scf = (0.001)*basic_pay;
		double salary = basic_pay + da + hra + pf + scf;
		System.out.println("Salary is"+ salary);
	}
```

```
}


public class Associate_professor extends Employee{
	int basic_pay;
	public Associate_professor(String n, int e_id, String addr, String email,
			int phn, int bp) {
		super(n, e_id, addr, email, phn);
		this.basic_pay = bp;
	}

	public void calculate(){
		double da = (0.97)*basic_pay;
		double hra = (0.10)*basic_pay;
		double pf = (0.12)*basic_pay;
		double scf = (0.001)*basic_pay;
		double salary = basic_pay + da + hra + pf + scf;
		System.out.println("Salary is"+ salary);
	}

}


public class Professor extends Employee{
	int basic_pay;
	public Professor(String n, int e_id, String addr, String email, int phn,
int bp) {
		super(n, e_id, addr, email, phn);
		this.basic_pay = bp;
	}

	public void calculate(){
		double da = (0.97)*basic_pay;
		double hra = (0.10)*basic_pay;
		double pf = (0.12)*basic_pay;
		double scf = (0.001)*basic_pay;
		double salary = basic_pay + da + hra + pf + scf;
		System.out.println("Salary is"+ salary);
```

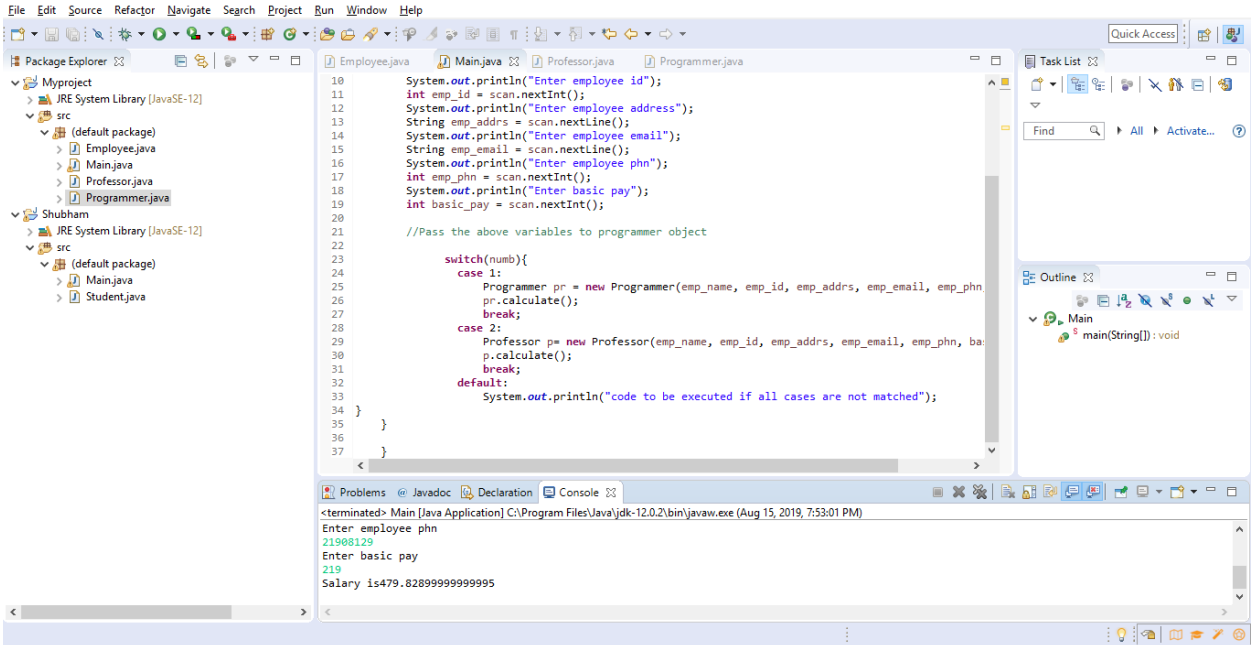
```
	}

}
```

```
import java.util.*;
public class Main {

	public static void main(String[] args) {
		Scanner scan = new Scanner(System.in);
		System.out.println("Enter employee name");
		String emp_name = scan.nextLine();
		System.out.println("Enter employee id");
		int emp_id = scan.nextInt();
		System.out.println("Enter employee address");
		String emp_addrs = scan.nextLine();
		System.out.println("Enter employee email");
		String emp_email = scan.nextLine();
		System.out.println("Enter employee phn");
		int emp_phn = scan.nextInt();
		System.out.println("Enter basic pay");
		int basic_pay = scan.nextInt();

		//Pass the above variables to programmer object
		Programmer pr = new Programmer(emp_name, emp_id,
emp_addrs, emp_email, emp_phn, basic_pay);
		pr.calculate();

	}
```

OUTPUT

```
Enter employee name
MATHEW
Enter employee id
1712
Enter employee address
```

cewewegweg
Enter employee email
buibcewewegwegwegnf.com
Enter employee phn
7324723
Enter basic pay
124
Salary is271.684



SCENARIO – III

Develop a java code get get username and password from the user if the password length is below 6 asked to change the password and print the no of user count using static members

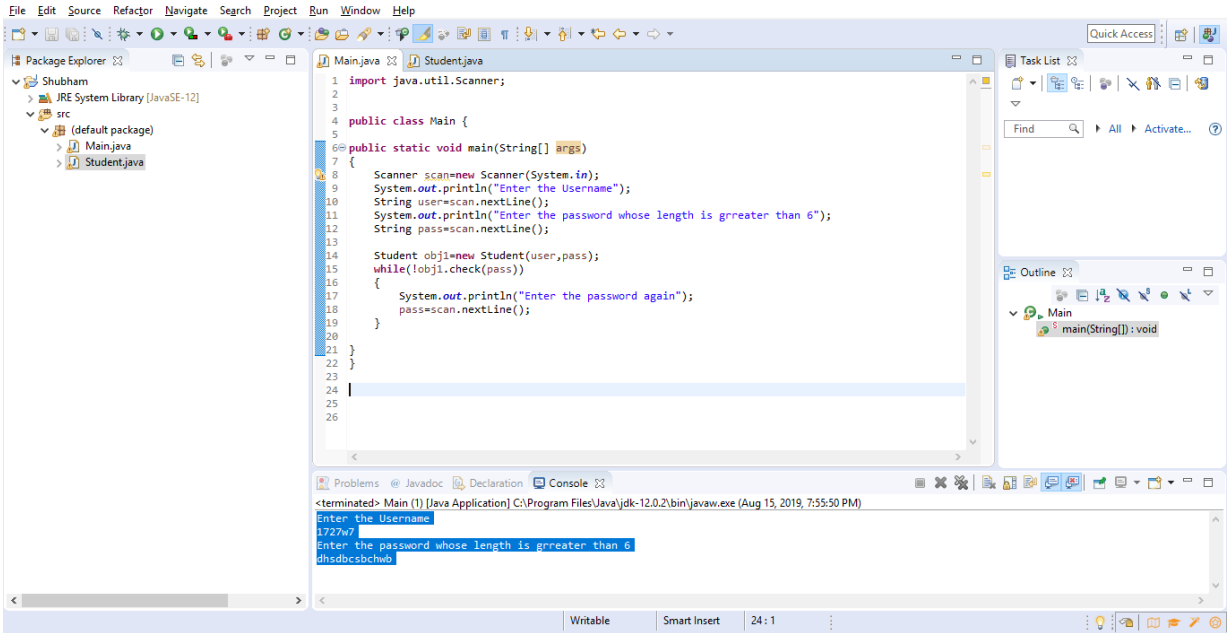
CODE-

```
public class User {

	public String Username;
	private String password;
	 static int count=0;

	User(String User,String pass)
	{
		count++;
		this.Username=User;
		this.password=pass;

	}
	public boolean check(String pass)
	{
	if(pass.length()<6)
		return false;
	else
		return true;
	}



}

import java.util.Scanner;
```

```
public class Main3 {
public static void main()
{
	Scanner scan=new Scanner(System.in);
	System.out.println("Enter the Username");
	String user=scan.nextLine();
	System.out.println("Enter the password whose length is grreater than
6");
	String pass=scan.nextLine();

	User obj1=new User(user,pass);
	while(!obj1.check(pass))
	{
		System.out.println("Enter the password again");
		pass=scan.nextLine();
	}

}
}
```

```
Enter the Username
1727w7
Enter the password whose length is grreater than 6
dhsdbcsbchwb
```

OUTPUT-


File Edit Source Refactor Navigate Search Project Run Window Help
Quick Access
Package Explorer
Shubham
JRE System Library [JavaSE-12]
src
(default package)
Main.java
Student.java
Main.java
Student.java
import java.util.Scanner;
public class Main {
public static void main(String[] args)
{
Scanner scan=new Scanner(System.in);
System.out.println("Enter the Username");
String user=scan.nextLine();
System.out.println("Enter the password whose length is grreater than 6");
String pass=scan.nextLine();
Student obj1=new Student(user,pass);
while(!obj1.check(pass))
{
System.out.println("Enter the password again");
pass=scan.nextLine();
}
}
}
Task List
Find
All
Activate...
Outline
Main
main(String[]) : void
Problems
Javadoc
Declaration
Console
<terminated> Main (1) [Java Application] C:\Program Files\Java\jdk-12.0.2\bin\javaw.exe (Aug 15, 2019, 7:55:50 PM)
Enter the Username
1727w7
Enter the password whose length is grreater than 6
dhsdbcsbchwb
Writable
Smart Insert
24 : 1