

JAVA-CSE1007-LAB ASSIGNMENT 3

AKSHATA A BHAT

20BCE0923

1. Develop a Java application for calculating the average performance index of 'n' employees in a company for incrementing their salary. Read the years of experience and the performance rating in all the years to calculate the average of them. This hike in the salary is only for the employees who have completed at least one year of service in the company. Make the Java application robust by handling the boundary conditions in a feasible way.

Code:

```
import java.util.Scanner;
class performance{
    int years;
    int rating[]=new int[10];
    Scanner scan=new Scanner(System.in);
    int i;
    void getData()
    {
        System.out.println("Enter Years of Experience:");
        years=scan.nextInt();
        System.out.println("Enter rating for each year");
        for(i=0;i<years;i++)
            rating[i]=scan.nextInt();
    }

    void avg(){
        int average,sum=0;
        for(i=0;i<years;i++)
            sum=sum+rating[i];
        try{
            average=sum/years;
            if(average>=1)
                System.out.println("Eligible");
        }
    }
}
```

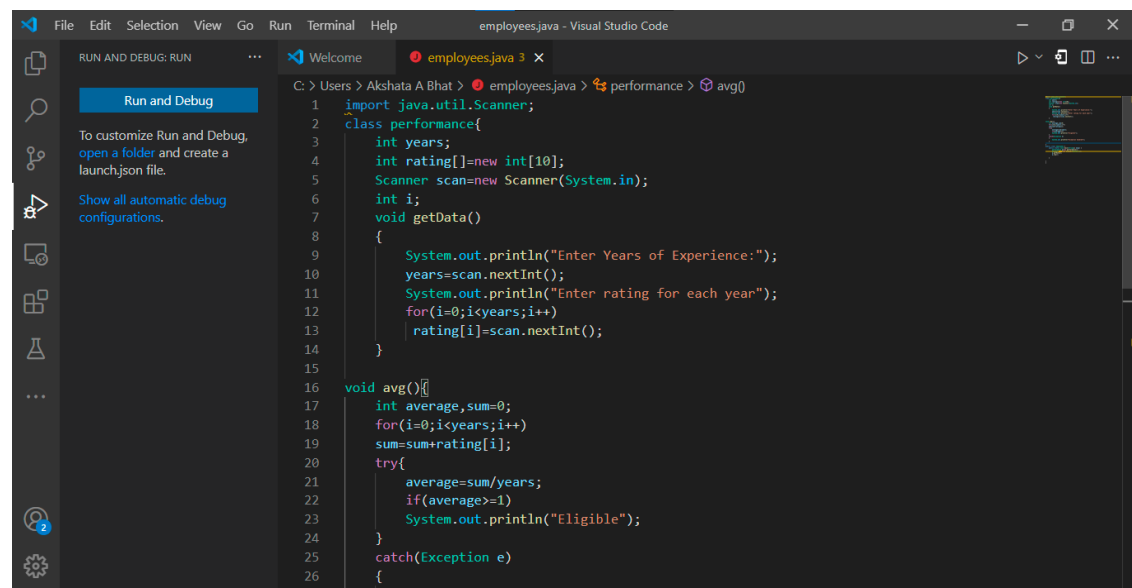
```

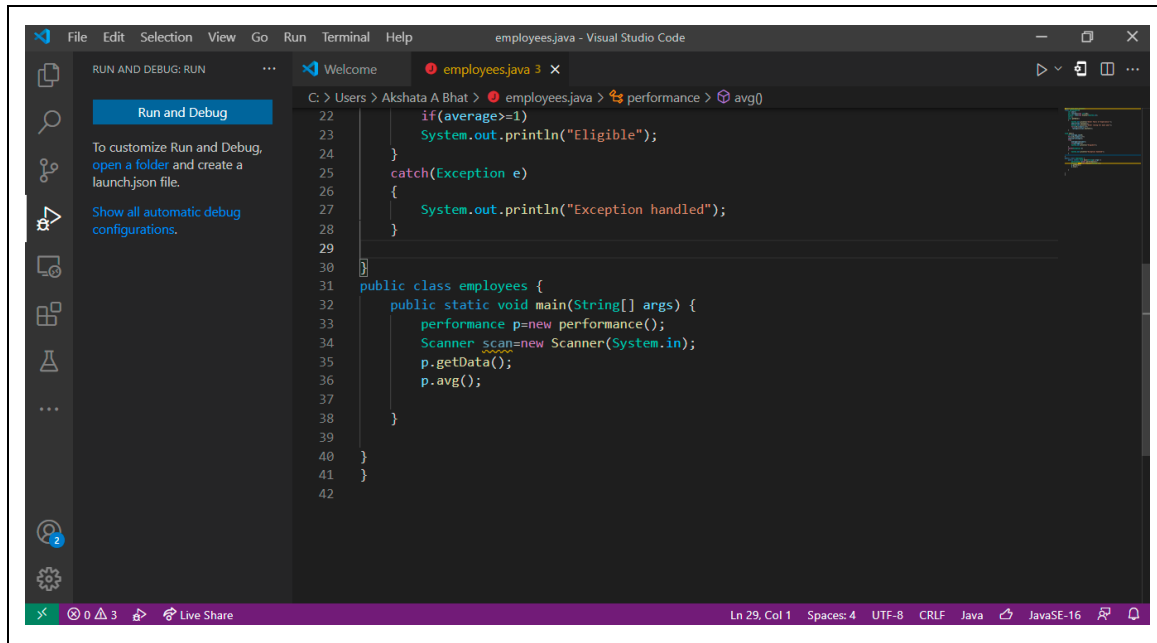
        catch(Exception e)
        {
            System.out.println("Exception handled");
        }
    }
}

public class employees {
    public static void main(String[] args) {
        performance p=new performance();
        Scanner scan=new Scanner(System.in);
        p.getData();
        p.avg();
    }
}
}

```

Screenshots:





Output:

```
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\Akshata A Bhat> & 'c:\Users\Akshata A Bhat\.vscode\extensions\vscjava.vscode-java
-debug-0.36.0\scripts\launcher.bat' 'C:\Program Files\Java\jdk-16.0.2\bin\java.exe' '--enable-
preview' '-XX:+ShowCodeDetailsInExceptionMessages' '-Dfile.encoding=UTF-8' '-cp' 'C:\Users\Aks
hata A Bhat\AppData\Local\Temp\vscodesws_9f255\jdt_ws\jdt.ls-java-project\bin' 'performance$em
ployees'
Enter Years of Experience:
5
Enter rating for each year
1
5
8
4
10
Eligible
PS C:\Users\Akshata A Bhat> 
```

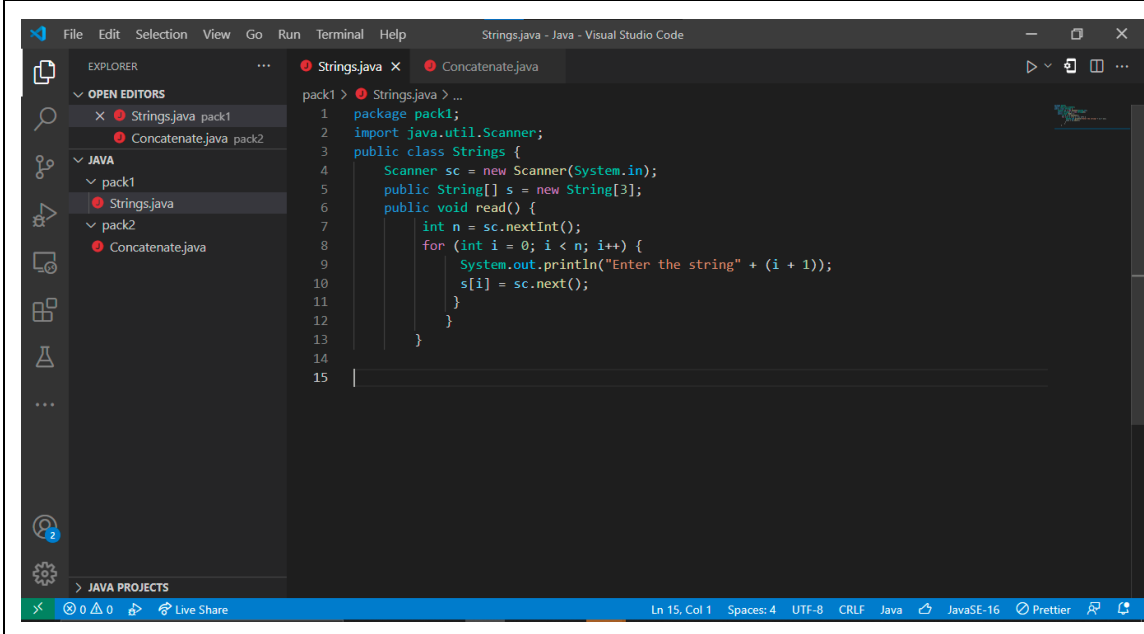
2. Design a class 'Strings' to read 'n' number of strings (in an array of strings) and returns a string on request in a package P1. Derive a sub class 'Concatenate' in a sub package P2 of P1 from 'Strings' which is capable of concatenating the strings in the array of same length and display.

Strings.java:

```

package pack1;
import java.util.Scanner;
public class Strings {
    Scanner sc = new Scanner(System.in);
    public String[] s = new String[3];
    public void read() {
        int n = sc.nextInt();
        for (int i = 0; i < n; i++) {
            System.out.println("Enter the string" + (i + 1));
            s[i] = sc.next();
        }
    }
}

```



Concatenate.java:

```

package pack2;
import pack1.Strings;
public class Concatenate extends Strings{
    void display(){

```

```

        String c;
        for (int i = 0; i < s.length; i++) {
            if (s[i].length() == s[i+1].length()) {
                c=s[i].concat(s[i+1]);

                System.out.println(c);
            }
        }

    }

}

class Demo8{

    public static void main(String[] args) {

        Concatenate s = new Concatenate();

        s.read();

        s.display();

    }

}

```

