

Date.....

Assignment-3

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B.Tech CSE A/I/I M.Y
Section - B

import java.util.*;

```
class InvalidMarksException extends Exception {  
    public InvalidMarksException (String msg) {  
        super (msg);  
    }  
}
```

Class Student {

```
long rollNumber; // Chaitanya long  
String studentName;  
int marks [] = new int [3];
```

Student (long r, String n, int m []) {

rollNumber = r;

studentName = n;

marks = m;

y

void validateMarks () throws InvalidMarksException {

for (int i=0; i<3; i++) {

if (marks [i] < 0 || marks [i] > 100)

throw new

InvalidMarksException ("Invalid Marks" + marks [i]);

y

Teacher's Sign

Final



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double calculateAverage () {
 return (marks[0] + marks[1] + marks[2]) / 3.0;
}

void displayResult () {
 System.out.println ("Roll: " + rollNumber);
 System.out.println ("Name: " + studentName);
 System.out.println ("Marks: " + marks[0] + " " + marks[1] +
 " " + marks[2]);
 double avg = calculateAverage ();
 System.out.println ("Average: " + avg);
 System.out.println ("Result: " + avg >= 40 ? "Pass"
 : "Fail");
}

public class ResultManager {

Student students[] = new Student [50];
int count = 0;
Scanner sc = new Scanner (System.in);

void addStudent () {

try {

System.out.print ("Roll No: ");
long n = sc.nextInt();
sc.nextLine();

System.out.print ("Name: ");
String n = sc.nextLine();

```
int m[ ] = new int [3];  
for (int i=0; i<3; i++) {  
    System.out.println ("Marks" + (i+1) + ":" );  
    m[i] = sc.nextInt();  
}
```

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```
Student s = new Student (r,n,m);  
s.setMarks();  
students [count++] = s;  
System.out.println ("Student Added");
```

↳ catch (InputMismatchException e) {

```
System.out.println (e.getMessage());
```

↳ catch (InputMismatchException e) {

```
System.out.println ("Invalid Input!");
```

```
sc.nextLine();
```

↳ finally {

```
System.out.println ("Add Student Completed");
```

↳ }

```
void showStudentDetails() {
```

try {

```
System.out.print ("Enter Roll No: ");
```

```
long r = sc.nextLong();
```

```
for (int i = 0; i < count; i++) {
```

if (Student[i].rollNumber == r) {

```
Student[i].displayResults();
```

```
return;
```

↳ }

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System.out.println ("Student not found");

y catch (Exception e) {

y System.out.println ("Error!");
y finally {

y System.out.println ("Search completed.");

y }

public static main () {

int ch = 0;

try {

do {

System.out.println ("1. Add Student")
Student/n 2. Show
Student/n 3. Exit");

System.out.println ("Enter choice: ");

ch = ch.nextInt();

if (ch == 1) addstudent ();

else if (ch == 2) showstudent details ();

else if (ch == 3) System.out.println ("Exit");

y which (ch != 3);

y finally {

sc.close();

y System.out.println ("Program closed.");

public static void main (String args []) {

y new ReadManger ().mainMenu();

Spiral

y

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