

18) → output

String after strlen(s): Hello

Character at index 4: 0

String after strchrAt(0, 'y'): Yello

Characters from index 0 to 1: Yello

String after append(): Yello - Extra text

String after insert(): Yello inserted text - extra text

String after replace(): Text at the text determined okay

String after delete(0, 5): extra - text determined okay

String after deleteCharAt(n): extra - text determined okay

String after replace(): Replaced Text - Text determined okay

Substring from index 0 to 3: Replaced text - text determined okay

Substring from index 0 to 3: Repl

17) Enter the details of Student 1:

Registration Number: 12

Full name: Rachana

Semester: 3

CGPA: 9.6

Enter the details of Student 2:

Registration Number: 13

Full name: Nisarga

Semester: 4

CGPA: 9.8

Enter the details of Student 3:

Registration number: 14

Full name: Monisha

Semester: 5

CGPA: 9.6

Student 1 Details

Registration Number: 12

Full name: Rachana

Semester: 3

CGPA: 9.6

Student 2 Details

Registration Number: 13

Full name: Nisarga

Semester: 4

CGPA: 9.8

Student 3 Details

Registration Number: 14

Full name: Monisha

Semester: 5

CGPA: 9.6

19)

Eagle is flying high  
Eagle says: swoosh  
Hawk is flying high  
Hawk says: screech.

20)

Circle Area: 78.53

Circle Perimeter: 31.415

Triangle Area: 6

Triangle perimeter: 12

~~10.0127~~

Student.java

23/1/24

```
package CIE;
import java.util.Scanner;
class Student {
    protected String usn = new String();
    protected String name = new String();
    protected int sem;
    public void inputStudentDetails()
    {
        Scanner s = new Scanner(System.in);
        System.out.println("Enter the usn");
        usn = s.next(); System.out.println("Enter the name"); name = s.next();
        System.out.println("Enter the Semester");
        sem = s.nextInt();
    }
    public void displayStudentDetails()
    {
        System.out.println("USN: " + usn);
        System.out.println("Name IS: " + name);
        System.out.println("Semester " + sem);
    }
}
```

Complete

Internals.java

```
package CIE;
import java.util.Scanner;
public class Internals extends Student {
    protected int marks[] = new int[5];
    public void inputCIEmarks()
    {
        Scanner s = new Scanner(System.in);
        System.out.println("Enter the marks of 5 subjects:");
        for (int i = 0; i < 5; i++)
        {
            System.out.println("Subject " + (i + 1) + ":");
            marks[i] = s.nextInt();
        }
    }
}
```



# Externals.java

```
package SEE;
```

```
import CIE.Internals;
```

```
import java.util.Scanner;
```

```
public class Externals extends Internals  
{
```

```
    protected Externals(int marks[];  
    protected int finalMarks[];
```

```
    public Externals()  
    {
```

```
        marks = new int[5];
```

```
        finalMarks = new int[5];  
    }
```

```
    public void inputSEEmarks()  
    {
```

```
        Scanner s = new Scanner(System.in);
```

```
        for(int i=0; i<5; i++)  
        {
```

```
            System.out.print("Subject" + (i+1) + " marks: ");
```

```
            marks[i] = s.nextInt();  
        }
```

```
    }
```

```
    public class void calculateFinalMarks()  
    {
```

```
        for(int i=0; i<5; i++)
```

```
        {  
            finalMarks[i] = marks[i]/2 + super.marks[i];  
        }
```

```
    public void displayFinalMarks()  
    {
```

```
        displayStudentDetails();
```

```
        for(int i=0; i<5; i++)
```

```
        {  
            System.out.println("Subject" + (i+1) + ": " + finalMarks[i]);  
        }
```

```
    }
```

```
}
```

Main.java

```
import SEE.Externals;
```

```
class Main {
```

```
    public static void main(String args[])
```

```
    {
        int numofStudents = 2;
```

```
        Externals finalMarks[] = new Externals[numofStudents];
```

```
        for (int i=0; i<numofStudents; i++)
```

```
        {
            finalMarks[i] = new Externals();
```

```
            finalMarks[i].inputStudentDetails();
```

```
            System.out.println("Enter CIE marks");
```

```
            finalMarks[i].inputCIEmarks();
```

```
            System.out.println("Enter SEE marks");
```

```
            finalMarks[i].inputSEEmarks();
```

```
        }
```

```
        System.out.println("Displaying data : \n");
```

```
        for (int i=0; i<numofStudents; i++)
```

```
        {
```

```
            finalMarks[i].calculateFinalMarks();
```

```
            finalMarks[i].displayFinalMarks();
```

```
        }
```

```
    }
```

```
}
```

Enter SEE marks  
Subject 1 marks: 78

enter the usn

2023BMSO2608

enter the name

Rachana

enter the semester

3

Enter CIE marks

enter the marks for 5 subjects

subject 1: 24

subject 2: 27

subject 3: 16

subject 4: 28

subject 5: 29

Enter OEF marks

Subject 1 marks: 89

2 marks: 98

3 marks: 88

4 marks: 87

5 marks: 86

USN: 2023BMSO2608

NAME IS: Rachana

Semester 3

Subject 1: 68

Subject 2: 76

Subject 3: 60

Subject 4: 71

Subject 5: 72

C:\Users\DELL\OneDrive\Desktop\BMS608\Lab6>

enter the usn

2023BMS02608

enter the name

Rachana

enter the semester

3

Enter CIE marks

enter the marks for 5 subjects:

subject1:24

subject2:27

subject3:16

subject4:28

subject5:29

Enter SEE marks

Subject 1 marks: 89

Subject 2 marks: 98

Subject 3 marks: 88

Subject 4 marks: 87

Subject 5 marks: 86

enter the usn

2023BMS567890

enter the name

nisarga

enter the semester

3

Enter CIE marks

enter the marks for 5 subjects:

Enter CIE marks

enter the marks for 5 subjects:

subject1:37

subject2:34

subject3:32

subject4:30

subject5:29

Enter SEE marks

Subject 1 marks: 89

Subject 2 marks: 68

Subject 3 marks: 76

Subject 4 marks: 92

Subject 5 marks: 88

Displaying data:

USN:2023BMS02608

NAME IS:Rachana

semester3

Subject 1: 68

Subject 2: 76

Subject 3: 60

Subject 4: 71

Subject 5: 72

USN:2023BMS567890

NAME IS:nisarga

semester3

Subject 1: 81

Subject 2: 68

Subject 3: 70

Subject 4: 76