

Laboratory Work

Subject: Java Technologies

Branch: B.Tech. (CE)

Semester: IV

Batch: A1

Student Roll No: CE001

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Question 1

```
import java.util.Scanner;

class Substr {

    public static void main (String [] args)
    {
        Scanner obj = new Scanner(System.in);
        System.out.print("Enter string : - ");
        String str = new String(obj.nextLine());
        System.out.println("The count is :- " + (str.split("hi").length + 1) );
    }
}
```

Solution

```
"C:\Program Files\Eclipse Adoptium\jdk-17.0.8.101-hotspot\bin\java.exe"
.jar=60148:C:\Users\LENOVO\AppData\Local\Programs\IntelliJ IDEA Ultimate
4\java\labs\out\production\labs" Substr
Enter string: nisarg
The count is: 0

Process finished with exit code 0
|
```

Question 2

```
import java.util.Scanner;

class plaindrom{
    public static void main (String [] args)
    {
        Scanner obj = new Scanner(System.in);
        System.out.print("Enter String :- ");
        String s = obj.nextLine();
        StringBuilder s1 = new StringBuilder(s.toLowerCase());
```

```

        StringBuilder s2 = new StringBuilder(s.toLowerCase());
        s2.reverse();

        if((s1.toString()).equals(s2.toString())) System.out.print("plindrom");
        else System.out.print(" not palindrom");
    }
}

```

Solution

```

"C:\Program Files\Eclipse Adoptium\jdk-17.0.8.101-hotspot\bin\java.exe
.jar=60172:C:\Users\LENOVO\AppData\Local\Programs\IntelliJ IDEA Ult
4\java\labs\out\production\labs" plaindrom
Enter String :- nisarggrasin
plindrom
Process finished with exit code 0

```

Question 3

```

import java.util.*;

class abbreviation{
    public static void main(String [] args)
    {
        Scanner obj = new Scanner(System.in);
        System.out.print("Enter string :- ");
        String S = obj.nextLine();

        int count = 1;
        String []Fullname = S.split(" ");
        StringBuffer n = new StringBuffer();
        for(String s : Fullname)
        {
            if(count%3 == 0)
            {
                n.append(s);
            }
        }
    }
}

```

```

        }
        else{
            n.append(String.valueOf(s.charAt(0)) + ".");
        }
        count++;
    }

    System.out.println("New string is :- " + n );
}
}

```

Solution

```

"C:\Program Files\Eclipse Adoptium\jdk-17.0.8.101-hotspot\bin\java.exe" "-java
.jar=60192:C:\Users\LENOVO\AppData\Local\Programs\IntelliJ IDEA Ultimate\bin"
4\java\labs\out\production\labs" abbreviation
Enter string :- Nisarg Amlani Kalpeshbahi
New string is :- N.A.Kalpeshbahi

Process finished with exit code 0
|

```

Question 4

```

import java.util.*;

class removespaces{

    static String remove_space(String s)
    {
        String []sarr = s.split(" ");
        StringBuffer sb = new StringBuffer();
        for( String str : sarr )
        {
            sb.append(str);
        }

        return sb.toString();
    }

    public static void main (String[] s)
    {

```

```

Scanner obj = new Scanner(System.in);
System.out.print("Enter string :- ");
String str = obj.nextLine();

System.out.print("New String is :- " + remove_space(str));

}
}

```

Solution

```

"C:\Program Files\Eclipse Adoptium\jdk-17.0
.jar=60745:C:\Users\LENOVO\AppData\Local\P
4\java\labs\out\production\labs" removespa
Enter string :- nisarg amlani
New String is :- nisargamlani
Process finished with exit code 0

```

Question 5

```

import java.util.*;

class Student{
    int roll;
    String name;
    float Average;
    int[] marks;

    Student(String name , int roll , int[] marks)
    {
        this.name = name;
        this.roll = roll;
        this.marks = marks;

        average_marks(marks);
    }

    void average_marks(int[] marks)
    {

```

```

        int n = marks.length;
        int sum = 0;

        for (int mark : marks) {
            sum += mark;
        }
        this.Average = sum*1.0f/n;
    }
}

class Main
{
    public static void main(String[] args)
    {
        Scanner obj = new Scanner(System.in);
        System.out.println("Enter number :- ");
        int n = obj.nextInt();
        Student[] stud = new Student[n];
        int highest = 0;
        int index = 0;
        for (int i = 0; i < n; i++)
        {
            obj.nextLine();
            System.out.println("Enter student name :- ");
            String name = obj.nextLine();
            System.out.println("Enter id :- ");
            int roll = obj.nextInt();
            int[] marks = new int[5];

            for (int j = 0; j < n; j++)
            {
                System.out.println("Enter marks of sub " + j + " :- ");
                marks[i] = obj.nextInt();
            }

            stud[i] = new Student(name, roll, marks);
            if (stud[i].Average > highest)
            {
                index = i;
            }
        }

        System.out.println(stud[index]);
    }
}

```

Solution