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COURSE CODE: CSE1007

COURSE TITLE: JAVA PROGRAMMING(EMBEDDED LAB)

SLOT: L31+L32

LAB ASSIGNMENT-1

Write a java code to do the following tasks:

- **Accept College name and city from the command line.**
- **Accept name of 5 students.**
- **Accept name of 5 students, their hometown, branch, blood group.**
- **Accept the test marks of 5 students.(The number of tests may not be equal).**
- **Calculate the average of each student and print.**
- **Use one static method.**

JAVA CODE

```
import java.util.*;
class show
{
   //STATIC METHOD
   public static void pr()
   {
      System.out.println("\nHello from the static method");
   }
}
public class th
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      //ACCESSING THE COMMAND LINE ARGUMENTS
      String clg=args[0];
```

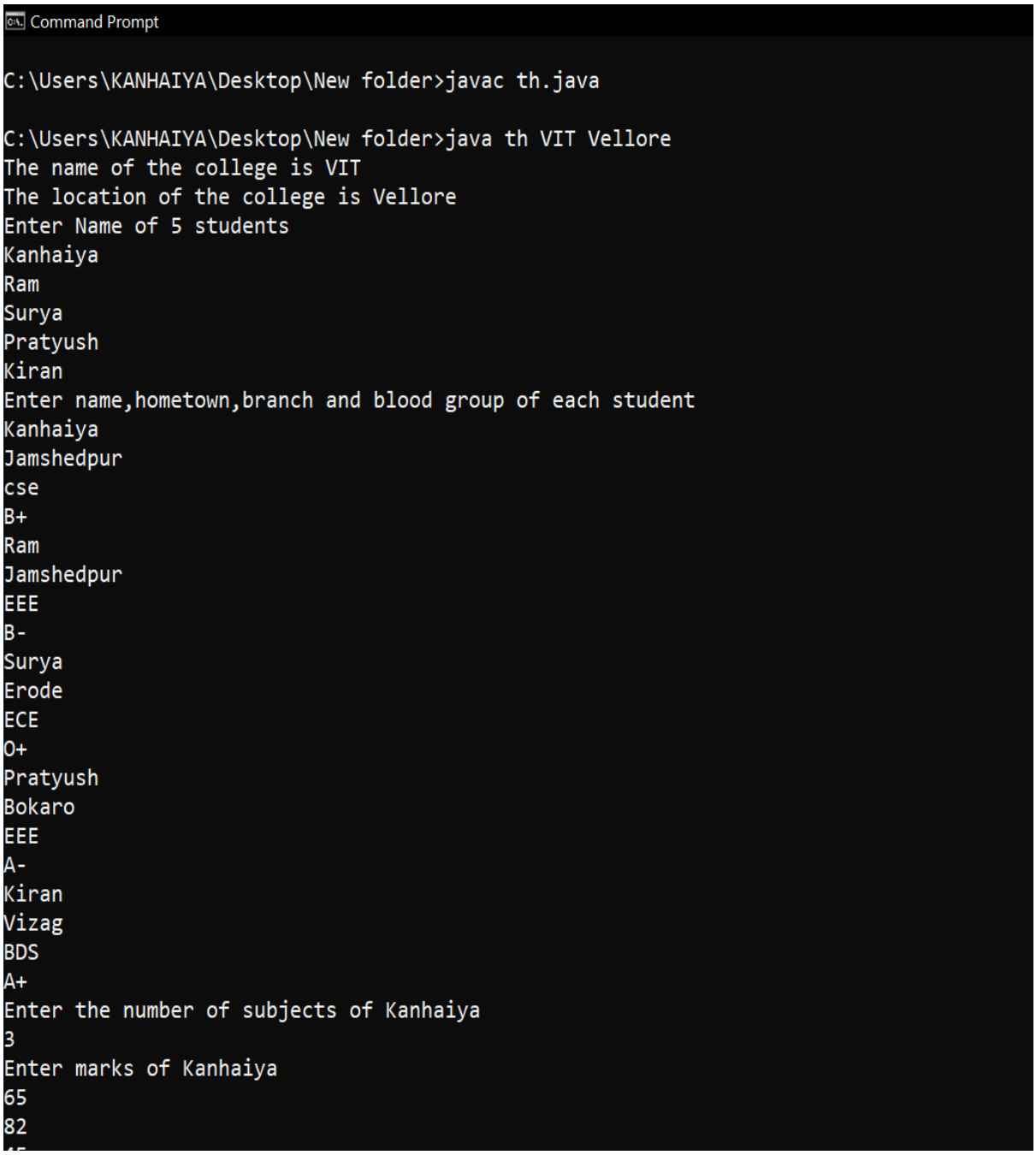
```
String city=args[1];
System.out.println("The name of the college is "+args[0]);
System.out.println("The location of the college is "+args[1]);
System.out.println("Enter Name of 5 students");
//USING 1-D ARRAY
String[] name=new String[5];
for(int i=0;i<5;i++)
{
      name[i]=sc.nextLine();
}
//USING 2-D ARRAY(NORMAL)
String[][] info=new String[5][4];
System.out.println("Enter name,hometown,branch and blood group of each student");
for(int i=0;i<5;i++)
{
   for(int j=0;j<4;j++)
   {
      info[i][j]=sc.nextLine();
   }
}
//USING 2-D JAGGED ARRAY
int marks[][]=new int[5][];
float[] avg=new float[5];
int sum=0;
for(int i=0;i<5;i++)
{
```

```
        int size;
        System.out.println("Enter the number of subjects of "+name[i]);
        size=sc.nextInt();
        //GIVING SIZE TO EACH COLOUMN IN JAGGED ARRAY
        marks[i]=new int[size];
        System.out.println("Enter marks of "+name[i]);
        sum=0;
        for(int j=0;j<size;j++)
        {
            marks[i][j]=sc.nextInt();
            sum+=marks[i][j];
        }
        avg[i]=sum/size;
    }
    System.out.println("\n");
    int co=0;
    //USING ENHANCED FOR LOOP
    for(float t:avg)
    {
        System.out.println("The average marks of "+name[co++]+" is "+t);
    }
    //SHOWING 10 BUILT IN STRING FUNCTIONS
    System.out.println("\n\nEnter a name for showcasing string functions\n");
    String n=sc.nextLine();
    System.out.println("\nThe character at index 0 is "+n.charAt(0));
    System.out.println("The unicode of character at index 0 is
"+n.codePointAt(0));
```

```
        System.out.println("The full name is "+n.concat(" Kumar"));
        System.out.println("The hashcode of the name is "+n.hashCode());
        System.out.println("The first index of k in the string is "+n.indexOf("a"));
        System.out.println("The length of the name is "+n.length());
        System.out.println("Is the string \"Ram\"? "+n.equals("Ram"));
        System.out.println("Does the string contains \"an\"? "+n.contains("an"));
        System.out.println("Does the string starts with \"a\"? "+n.startsWith("a"));
        System.out.println("The string in lowercase is "+n.toLowerCase());
         System.out.println("The string in uppercase is "+n.toUpperCase());
        int[] newa=new int[10];
        int newaa[]={1,2,3,4,5,6,7,8,9,0};
        System.out.println("\n\nEnter the array elements");
        for(int i=0;i<10;i++)
        {
           newa[i]=sc.nextInt();
        }
        //SHOWING 5 BUILT IN ARRAY FUNCTIONS
        System.out.println("Enter a number to be searched");
        int key=sc.nextInt();
        System.out.println("Found at index "+Arrays.binarySearch(newa,key));
        System.out.println("Are the both array equal?
"+Arrays.equals(newa,newaa));
        System.out.println("The result of comparasion of both array is
"+Arrays.compare(newa,newaa));
        System.out.println("The deep hashcode for the array is
"+Arrays.hashCode(newa));
        Arrays.sort(newa);
```

```
        System.out.println("The array after sorting is "+Arrays.toString(newa));
        //USING STATIC METHOD
        show.pr();
    }
}
```

OUTPUT SCREENSHOTS



```
Command Prompt
Enter the number of subjects of Kanhaiya
3
Enter marks of Kanhaiya
65
82
45
Enter the number of subjects of Ram
2
Enter marks of Ram
58
65
Enter the number of subjects of Surya
4
Enter marks of Surya
65
98
65
98
Enter the number of subjects of Pratyush
1
Enter marks of Pratyush
54
Enter the number of subjects of Kiran
4
Enter marks of Kiran
65
89
98
85


The average marks of Kanhaiya is 64.0
The average marks of Ram is 61.0
The average marks of Surya is 81.0
The average marks of Pratyush is 54.0
The average marks of Kiran is 84.0
Enter a name for showcasing string functions
```

```
Command Prompt
Enter a name for showcasing string functions

Kanhaiya

The character at index 0 is K
The unicode of character at index 0 is 75
The full name is Kanhaiya Kumar
The hashcode of the name is 1003547360
The first index of k in the string is 1
The length of the name is 8
Is the string "Ram"? false
Does the string contains "an"? true
Does the string starts with "a"? false
The string in lowercase is kanhaiya
The string in uppercase is KANHAIYA


Enter the array elements
58
65
45
58
65
583
65
45
58
54
Enter a number to be searched
58
Found at index 0
Are the both array equal? false
The result of comparasion of both array is 1
The deep hashcode for the array is 1623692899
The array after sorting is [45, 45, 54, 58, 58, 58, 65, 65, 65, 583]

Hello from the static method
```

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