**LAB – 6**

**23BE7416**

**1) . Write a code to build a student management system that stores marks of 5 students, Calculate total average. Use Collections**.

import java.util.HashMap;

import java.util.Map;

import java.util.Scanner;

public class Hash {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

HashMap<String, Integer> studentMarks = new HashMap<>();

int total = 0;

int numberOfStudents = 5;

for (int i = 1; i <= numberOfStudents; i++) {

System.out.print("Enter student name: ");

String name = sc.nextLine();

System.out.print("Enter marks of " + name + ": ");

int marks = sc.nextInt();

sc.nextLine();

studentMarks.put(name, marks);

total += marks;

}

double average = (double) total / numberOfStudents;

System.out.println("\n--- Student Marks ---");

for (Map.Entry<String, Integer> entry : studentMarks.entrySet()) {

System.out.println(entry.getKey() + ": " + entry.getValue());

}

System.out.print("\nTotal:"+total);

System.out.println("\nAverage Marks: " + average);

}

}

**OUTPUT;**

**Enter student name: A**

**Enter marks of A: 55**

**Enter student name: B**

**Enter marks of B:**

**66**

**Enter student name: C**

**Enter marks of C: 77**

**Enter student name: D**

**Enter marks of D: 88**

**Enter student name: E**

**Enter marks of E: 99**

**--- Student Marks ---**

**A: 55**

**B: 66**

**C: 77**

**D: 88**

**E: 99**

**Total:385**

**Average Marks: 77.0**

**//---------------------------------------------**

**2). Write a java code to perform the String Operations**

**Hide Last 4 Digits of a Phone Number**

**Hide Middle Part of an Email .**

**Replace All Characters Except First and Last.**

public class SimpleStringOperations {

public static void main(String[] args) {

String phone = "9876543210";

String email = "example@gmail.com";

String word = "Sumanth";

// 1. Hide last 4 digits of phone number

String hiddenPhone = phone.substring(0, phone.length() - 4) + "\*\*\*\*";

System.out.println("Hidden Phone: " + hiddenPhone);

// 2. Hide middle part of email

int at = email.indexOf('@');

String emailHidden = email.charAt(0) + "\*\*\*\*\*" + email.charAt(at - 1) + email.substring(at);

System.out.println("Hidden Email: " + emailHidden);

// 3. Replace all characters except first and last

String middleHidden = word.charAt(0) + "\*\*\*\*\*" + word.charAt(word.length() - 1);

System.out.println("Hidden Word: " + middleHidden);

}

}

**Output;**

**Hidden Phone: 987654\*\*\*\***

**Hidden Email: e\*\*\*\*\*e@gmail.com**

**Hidden Word: S\*\*\*\*\*h**

**=== Code Execution Successful ===**