Lab 13

Single dimension array

Name-Surname	Student No	Section (LAB)
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Lab instruction

1. Write the java program following the example.

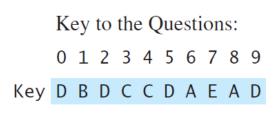
PassTwoDimensionalArray.java is a program that can create 2 dimensions array. The method getArray() will get the number from user into each array. The method sum() is summary all of number in the m array.

```
import java.util.Scanner;
public class PassTwoDimensionalArray {
  public static void main(String[] args) {
    int[][] m = getArray(); // Get an array
    // Display sum of elements
    System.out.println("\nSum of all elements is " + sum(m));
  public static int[][] getArray() {
    // Create a Scanner
    Scanner input = new Scanner (System.in);
    // Enter array values
    int[][] m = new int[3][4];
    System.out.println("Enter " + m.length + " rows and "
      + m[0].length + " columns: ");
    for (int i = 0; i < m.length; i++)</pre>
      for (int j = 0; j < m[i].length; j++)
  m[i][j] = input.nextInt();</pre>
    return m;
  public static int sum(int[][] m) {
    int total = 0;
    for (int row = 0; row < m.length; row++) {</pre>
      for (int column = 0; column < m[row].length; column++) {</pre>
        total += m[row][column];
    return total;
```

- 2. Run and test the program.
- 3. Modify the program to show all numbers by using void method

4. Write a Java program for grading multiple choices test. The student id and answer are collected in 2 dimension array in picture 1. The key to correct the score is picture 2. You can use the list of student answer as an initial in your code. The program will display the student number and the correct score as the sample run.

	0	1	2	3	4	5	6	7	8	9
Student 0 Student 1 Student 2 Student 3 Student 4 Student 5 Student 6 Student 7	A D E C A B B E	B D B B B	A D A D E A	BAECCC	C C D C C C	A B C D D	EEEE	EEEEE	A A A A	D D D D D D D D
Picture 1 Student 0's correct count is 7 Student 1's correct count is 6										U



Picture 2

Student 2's correct count is 5 Student 3's correct count is 4 Student 4's correct count is 8 Student 5's correct count is 7

Student 6's correct count is 7

Sample run

```
{'A', 'B', 'A', 'C', 'C', 'D', 'E', 'E', 'A', 'D'},
{'D', 'B', 'A', 'B', 'C', 'A', 'E', 'E', 'A', 'D'},
{'E', 'D', 'D', 'A', 'C', 'B', 'E', 'E', 'A', 'D'},
{'C', 'B', 'A', 'E', 'D', 'C', 'E', 'E', 'A', 'D'},
{'A', 'B', 'D', 'C', 'C', 'D', 'E', 'E', 'A', 'D'},
{'B', 'B', 'E', 'C', 'C', 'D', 'E', 'E', 'A', 'D'},
{'B', 'B', 'A', 'C', 'C', 'D', 'E', 'E', 'A', 'D'},
{'E', 'B', 'E', 'C', 'C', 'D', 'E', 'E', 'A', 'D'}};
```

Student 7's correct count is 7 char[][] answers = { Student answer

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