CMSC131, Spring 2022, QUIZ #4 (DURATION: 20 MINUTES) – 30 pts

FIRSTNAME, LASTNAME (PRINT IN UPPERCASE): KEY

STUDENT ID (e.g. 123456789):

INSTRUCTIONS:

- Write the code for a static method . It will return a 1-D array where the integer at index i of the returned array is the sum of all the values in row i of the 2-D parameter array. You can assume that the parameter will not be null, and the rows will not be null (however an empty row is allowed). The size of the returned array must be exactly the same as the number of rows in the parameter. As seen in the example output, you cannot assume the parameter will be rectangular.

Driver

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

    int [][] input1 = {  {5,6,7},
                         {1},
                         {2,3},
                         {},
                         {3,4,5}};


    int [][] input2 = { {5,6,17},
                        {-5,6,7,13}};

    System.out.println(Arrays.toString(sumArray(input1)));
    System.out.println(Arrays.toString(sumArray(input2)));

}
```

Output

```
[18, 1, 5, 0, 12]
[28, 21]
```

WRITE THE CODE ON THE BACK

```java
public static int[] sumArray(int[][] data) {

        int [] retVal = new int[data.length];

        for (int row = 0; row < data.length; row++) {
            int sum =0;
            for (int col = 0; col < data[row].length; col++) {
                sum += data[row][col];
            }
            retVal[row] =sum;
        }
        return retVal;




}
```