

<b>Started on</b>	Saturday, 16 December 2023, 5:00 PM
<b>State</b>	Finished
<b>Completed on</b>	Saturday, 16 December 2023, 5:50 PM
<b>Time taken</b>	49 mins 51 secs
<b>Grade</b>	<b>13.50</b> out of 15.00 ( <b>90%</b> )

### Question 1

Complete

Mark 2.00 out of 2.00

Find the syntax error(s) in the following code segment:

```
public static void main(String[] args) {
    int y=5,x;
    if (y >= 4);
    {
        y+=x;
    }
    System.out.print("x =" +x+" y="+y);
}
```

syntax error : the variable x not initialized ,  
logic error : semicolon in the end of - if(y>=4);



## Question 2

Complete

Mark 1.00 out of 2.00

Find the syntax error(s) in the following code segment:

```
int a[][] = new int[10][];  
int sum = 0;  
for(int i=0; i<= a.length; i++)  
    sum+=a[i][i];  
  
System.out.println("summation of diagonal"+sum);  
System.out.println("the number of rows:"+a.length);  
System.out.println("the number of columns:"+a[0].length);
```

Array length missing  
in a[][] = new int [10][];  
another for loop for the multidimensional array



**Question 3**

Complete

Mark 1.00 out of 1.00

write an alternative code for the following segment using IF statements instead of SWITCH-CASE:

```
switch (day) {  
  case 1:  
  case 2:  
  case 3:  
  case 4:  
  case 5: System.out.println("Weekday");  
    break;  
  case 0:  
  case 6: System.out.println("Weekend");  
}
```

```
if(day==5){  
    System.out.println("Weekday");  
    break; }  
else if(day==6)  
    System.out.println("Weekend");  
else
```



#### Question 4

Complete

Mark 4.00 out of 4.00

Write a method that takes a single string as parameter, the string contains a full name; first, middle and last name, and then method should divide the string into three strings each holding one part of the name. Assume the name parts are separated by spaces.

note: You only need to write the method, no need to write the main method or the class. and the method doesn't return or print anything.

example for a full name to be sent to the method:

```
String fullName = "Kim Adam Jones";
```

your code must separate Kim, Adam and Jones and save each in its own string

```
public static void separateFullName(String fullName) {  
    int k = fullName.indexOf(' ');  
    int m = fullName.indexOf(' ', k+1 );  
    String firstName = fullName.substring(0, k);  
    String middleName = fullName.substring(k + 1 , m+1);  
    String lastName = fullName.substring(m+1);  
}
```



**Question 5**

Complete

Mark 5.50 out of 6.00

Write a code that creates a multidimensional array with the following description:

1. the array contains the scores for multiple students, each row is dedicated for a single student
2. each cell of each row contains that student's grade in a course
3. students can different amount of courses

Your code should ask user to input the following:

1. how many students (to decide how many rows)
2. how many courses each student has taken (to decide how many cells or columns for each row)
3. the grades for all courses each student has taken

The output:

Your code should print the average of grades each student has

note: no need to write a method, no need to write main method or class for the code

```
Scanner sc = new Scanner(System.in);
int n = 0, x=0;
System.out.println("Enter the number of Students");
n = sc.nextInt();
int [][] grades = new int[n][];
for(int i =0; i<grades.length; i++){
    System.out.println("Enter the number of courses for student " +i);
    grades[i] = new int[sc.nextInt()];}
for(int i=0; i<grades.length; i++){
    for( int j=0; j<grades[i].length; j++){
        System.out.println("for student " +i+"enter grade for course "+j);
        grades[i][j] = sc.nextInt(); }
}
int sum = 0;
for(int i=0; i<grades.length; i++){
    for( int j=0; j<grades[i].length; j++){
        sum+=sc.nextInt(); }
System.out.println("average for student " +i+ (double)sum/grades[i].length);
}
```

