Question - 1
Java - Doctor

Note - ANY MEANS OF INTENDED MALPRACTICE WHILE ATTEMPTING THIS QUESTION IS LIABLE TO HIGHEST POSSOBLE STRICT HR ACTIONS AS IT IS VIOLATION OF INTEGRITY. HENCE, REFRAIN FROM ANY SUCH MEANS AND ATTEMPT THIS QUESTION AS PER YOUR EXPERTISE ONLY.

Title: Doctor

Create a class Doctor with below attributes:
id - int
name - String
salary - double
age - int

Write getters, setters and parameterized constructor in the above-mentioned attribute sequence as required.

Create class Solution with main method
Implement astatic method - searchDoctorByName in Solution class.

searchDoctorByName:
Create a static method searchDoctorByName in the Solution class. This method will take an array of Doctor objects and Name as input and returns the Doctor object having the mentioned Name if found else return null if not found.

This method should be called from the main method.

Write code to perform the following tasks:

1. Take the necessary input variable and call searchDoctorByName. For this method - The main method should print the Doctor object details as it is, if the returned value is not null, or it should print "No Doctor found with mentioned attribute." (excluding the quotes).

The above mentioned static method should be called from the main method. Also write the code for accepting the inputs and printing the outputs. Don't use any static test or formatting for printing the result. Just invoke the method and print the result

Note :
All String comparison needs to be case in-sensitive
You can use/refer to the below given sample input and output to verify your solution.

Sample Input (below) description:
The 1st input taken in the main section is the number of Doctor objects to be added to the list of Doctor.
The next set of inputs are id,name,salary,age for each Doctor object taken one after another and is repeated for the number of Doctor objects given in the first line of input.
The last line of inputs will be the arguments which need to be passed as parameters to the methods.
Consider below sample input and output to test your code:

Sample Input 1 - public
4
108
Teja
24000
24
100
Sid

29000
33
110
Esha
25000
32
111
Shreya
56000
31
Teja

Sample Output 1 :
id-108
name-Teja
salary-24000.0
age-24

Sample Input 2 - public
4
113
Anu
24000
58
106
Eva
51000
93
115
Hema
28000
22
102
Nisha
16000
31
Hema

id-115
name-Hema
salary-28000.0
age-22

Sample code snippet for reference:
Please use below code to build your solution.

```
import java.util.Scanner;
public class Solution
{
 public static void main(String[] args)
{
  //code to read values
  //code to call required method
  //code to display the result
}
public static Doctor searchDoctorByName(/* required parameters to be added */)  {
  //method logic
  }
}
```

```
class Doctor
{
 //code to build the class
}
```

Note on using Scanner object:
Sometimes the scanner does not read the new line character while invoking methods like nextInt(), nextDouble() etc.
Usually, this is not an issue, but this may be visible while calling nextLine() immediately after those methods.
Consider below input values:
100
Paragon
Referring below code:

```
Scanner sc = new Scanner(System.in);
int x = sc.nextInt();
String str = sc.nextLine(); -> here we expect str to have the value Doctor name.Instead it may be "".
```

If the above issue is observed, then it is suggested to add one more explicit call to nextLine() after reading the numeric value.

Question - 2

Unix - Find major students

The details of students are stored in a file(inputfile) in the following format.
Roll|Name|Major|Semester.
The pipe symbol '|' is used as the field delimiter for the file.
Write the Unix command to print the count of the students who has major in English or in Geography .
In case the file does not have any student record and have the column heading only , the script should print "No records found." (without the quotations).
For more details refer the sample output below

The file name will be provided as command line argument when the script containing your command will run.

Note:
The file will automatically be loaded with the input records of students in the format (Roll|Name|Major|Semester) mentioned from the testcase input(student records) we have configured in the Qn **or** When you are using the **custom input option (**to supply your input) to supply input for the script or command then the input file will be loaded with the input you will provided in the custom input text area. So you do not have to worry about , how the data will be loaded into the file.
You just need to implement the script/command by assuming that the input file is supplied as a first command line argument to the script or command(you are writing) and you need to read the content of the input file supplied in the form of command line argument and implement logic as per the requirement.

You can use shell variables (e.g. $0,$1,$2) whichever is applicable for your requirement to provide the command line argument.

For more clarity, please refer to the sample input and output below.

Note: The string values for major and semester can be in any case , hence search should be case insensitive.

Sample Input 1 :

```
Roll|Name|Major|Semester
01|Rudra G|English|3rd Sem
02|Annie|History|2nd Sem
03|Varun Goel|Maths|2nd Sem
04|Rakesh|Geography|2nd sem
05|Abdul M|Maths|1st Sem
```

Output :

```
Count of students for English Major = 1
Count of students for Geography Major = 1
```

Sample Input 2 :

```
Roll|Name|Major|Semester
```

Output :

```
No records found.
```