

# Tech Test: Ruby on Rails

Please complete and return this technical test by the agreed deadline. Let us know if you have any questions.

## **Test Details:**

1. **Test Duration:** 4 hours

2. **Exercise:**

1. Write a ruby code to Identify the Month.
2. Build a simple web application for doctors and patients appointment booking.

# **Important Points:**

- **Below point number 1,2,3 are applied to exercise 1.**
  - **All points are applied to exercise 2.**
1. All source code should be pushed to Github regular basis and add shubham-drcsystems to your GitHub repo
  2. Once you start exercise please make an initial commit on GitHub.
  3. Use the Latest Stable Version of Ruby and Rails OR Ruby.
  4. Use PostgreSQL Database.
  5. After successfully completing the project, We will schedule a call and you have to explain the code.

## **Exercise 1**

**Write a ruby code for Identify the Month.**

Your monthly salary is S.

You are writing a table of 12 columns each denoting a month starting from January, February,..., December. You are filling the table with the cumulative sum of salary starting from the first row (beginning) continuously for an infinite time.

**Example:** If S is 100 then Bob's table would look like:

January	February	March	...	December
100	200	300	...	1200
1300	1400	1500	...	2400

You need to answer Q questions where each question consists of two numbers S and X. X is one of the values from the table. You need to print the column number i.e. the number of months to which X belongs to.

### **Input format**

**First line:** An integer Q

**Next Q lines:** Each line consists of S and X

### **Output format**

Print the column number to which X belongs to (January denoting column 1 and December denoting column 12).

### **Sample Input**

100 2500

100 200

## **Sample Output**

1

2

## **Exercise 2**

**Build a simple web application where doctors and patients can do the following things.**

### **Doctor**

1. Sign up
2. Sign in
3. A Doctor can set availability for an appointment. Where they can set start time and end time and the interval of the slot will be default 1 hour. (Till Next 7 days) e.g.

start-time = 10:00 and end-time = 13:00

so the slots will look like this below

<b>Monday</b>	<b>Tuesday</b>	<b>...</b>	<b>Sunday</b>
<b>10:00 to 11:00</b>	<b>10:00 to 11:00</b>	<b>...</b>	<b>10:00 to 11:00</b>
<b>11:00 to 12:00</b>	<b>11:00 to 12:00</b>	<b>...</b>	<b>11:00 to 12:00</b>
<b>12:00 to 13:00</b>	<b>12:00 to 13:00</b>	<b>...</b>	<b>12:00 to 13:00</b>

4. A doctor can see the history of booked appointments.
5. Accept or Reject an Appointment.

## **Patient**

1. Sign up
2. Sign in

3. Choose a doctor and book an appointment as per the availability of the selected doctor.
4. A patient can see the history of booked appointments.
5. A patient can't book twice in the same time slot for any doctor.

**Best of Luck!**