**Drive the car**

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Suppose you are car driver and you have to drive a car on a track divided into "N" no. of sub-tracks. You are also given the value of "K" i.e. the total kilometers a car can drive on each sub-track. If the car can't cover a sub-track, you can add any unit of Petrol in it. With each unit of petrol added, the total kilometers your car can travel will increase by one unit .  
  
**Input:**  
The first line of input contains an integer T denoting the no of test cases. Then T test cases follow. Each test case contains two space separated integers N and K. The second line of each test case contains N space separated integers (A[])  denoting the distance of each N sub-tracks.

**Output:**  
For each test case in a new line you have to print out the minimum unit of Petrol your car require to cover all the sub-tracks. If no extra unit of petrol is required, print -1.  
  
**Constraints:**  
1<=T<=100  
1<=N,K<=200  
1<=A[]<=1000  
  
**Example:  
Input:**  
2  
5 7  
2 5 4 5 2  
5 4  
1 6 3 5 2  
**Output:**  
-1  
2  
  
**Explanation:**  
In Case 2, you are given 5 sub-tracks with different kilometers. Your car can travel 4 km on each sub-track. So, when you come on sub-track 2nd you have to cover 6 km of distance, so you need to have 2 unit of petrol more to cover the distance, for 3rd sub-track, now your car can travel 6 kilometers, so no problem and so on.

\*\*For More Examples Use Expected Output\*\*

<http://practice.geeksforgeeks.org/problems/drive-the-car/0>

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package javaapplication249;

import java.io.BufferedReader;

import java.io.IOException;

import java.io.InputStreamReader;

import java.util.ArrayList;

import java.util.Arrays;

import java.util.Collections;

import java.util.HashSet;

/\*\*

\*

\* @author Administrador

\*/

public class JavaApplication249 {

/\*\*

\* @param args the command line arguments

\*/

public static void main(String[] args) throws IOException {

// TODO code application logic here

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

int t = Integer.parseInt(br.readLine());

while(t-- > 0) {

String[] nk = br.readLine().trim().split(" ");

int n = Integer.parseInt(nk[0]);

int k = Integer.parseInt(nk[1]);

String[] input = br.readLine().trim().split(" ");

int[] a = new int[n];

for(int i =0; i<n; i++){

a[i] = Integer.parseInt(input[i]);

}

int ans = 0;

for(int i =0; i<a.length; i++) {

if(a[i] > k) {

ans += a[i] - k;

k = a[i];

}

}

if(ans ==0) {

System.out.println(-1);

}else{

System.out.println(ans);

}

}

}

}