

## CanYouDolt.java

```
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
import java.math.BigInteger;

/**
 * Created by juan on 14/03/17.
 */
public class CanYouDoIt {

    static int low = 0;
    static int high = 350, mid;
    static BigInteger tmp, k, N;

    static int find(){
        while (high >= low) {
            mid = (high + low) / 2;
            tmp = k.pow(mid);
            if (tmp.equals(N))
                return mid;
            else if (tmp.compareTo(N) > 0){
                high = mid - 1;
            }
            else{
                low = mid + 1;
            }
        }
        return -1;
    }

    public static void main(String[] args) throws IOException{
        BufferedReader br = new BufferedReader( new InputStreamReader( System.in ) );
        int T;
        T = Integer.parseInt(br.readLine());
        for(int c = 0; c < T; c++){
            String[] s = br.readLine().split(" ");
            high = 350;
            low = 0;
            switch (s[0]){
                case "2":
                    high = 336;
                    break;
                case "3":
                    high = 215;
                    break;
                case "4":
                    high = 170;
                    break;
                case "5":
                    high = 145;
                    break;
                case "6":
                    high = 130;
                    break;
                case "7":
                    high = 120;
                    break;
                case "8":
                    high = 112;
                    break;
                case "9":
```

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        high = 106;
        break;
    case "10":
        high = 100;
        break;
    }
    k = new BigInteger(s[0]);
    N = new BigInteger(s[1]);
    System.out.println(find());
}
}
```