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//Priyankaa Balaji
//ACSL Contest 1
import java.util.*;
public class PriyankaaB201920C1NumTransform
{
    public static String transform(String num, String p)
    {
        int numLen = num.length();
        int N =0;
        int sum =0;
        int diff =0;
        int position = Integer.parseInt(p);
        int P =
Integer.parseInt(num.substring((numLen-position),(numLen-position+1)));
        for(int i=0; i<(numLen-position); i++)
        {
            N = Integer.parseInt(num.substring(i,(i+1)));
            sum = P+N;
            if(sum>9) sum-=10;
            String newNum = Integer.toString(sum);
            num = num.substring(0,i) + newNum + num.substring(i+1);
        }

        for(int j=(numLen-position+1); j<num.length(); j++)
        {
            N = Integer.parseInt(num.substring(j,(j+1)));
            diff = Math.abs(P-N);
            String changedNum = Integer.toString(diff);
            num = num.substring(0,j) + changedNum + num.substring(j+1);
        }

        return num;
    }
}

public static void main(String args[])
{
    PriyankaaB201920C1NumTransform a = new PriyankaaB201920C1NumTransform();
    int count =0;
    while (count<5)
    {
        System.out.println("Type in your numbers separated by a space");
        Scanner input = new Scanner(System.in);
        String inpNum = input.nextLine();
        int space = inpNum.indexOf(" ");
        String separatedNum = inpNum.substring(0,space);
        String p = inpNum.substring(space).trim();
        String finalNum = a.transform(separatedNum, p);
        System.out.println(finalNum);
        count+= 1;
    }
}

```

}

}