## **HackerRank**

# Project Euler #8: Largest product in a series

This problem is a programming version of Problem 8 from projecteuler.net

Find the greatest product of K consecutive digits in the N digit number.

#### **Input Format**

First line contains T that denotes the number of test cases. First line of each test case will contain two integers N & K. Second line of each test case will contain a N digit integer.

#### **Constraints**

- $1 \le T \le 100$
- $1 \leqslant K \leqslant 7$
- $K \le N \le 1000$

#### **Output Format**

Print the required answer for each test case.

#### Sample Input 0

```
2
10 5
3675356291
10 5
2709360626
```

#### Sample Output 0

```
3150
0
```

### **Explanation 0**

- For 3675356291 and selecting K=5 consequetive digits, we have 36753, 67535, 75356, 53562, 35629 and 56291. Where  $6\times7\times5\times3\times5$  gives maximum product as 3150
- For 2709360626, 0 lies in all selection of 5 consequetive digits hence maximum product remains 0