# 1 Teams in Class

The class teacher of a class is to divide the class in to two teams. There are M stacked books on a pile P. Each book has a number written on it. Then there will be R iterations. In j-th iteration, teacher starts picking up books in P[j-1] from top one by one and check whether the number written on the book is divisible by the j-th prime. If the number is divisible, she stacks that book on pile Q as Q[j]. Otherwise, she stacks that book on pile Pas P[j]. After R iterations, books can only be on pile Q[1],Q[2],.....Q[R],P[R]. Output the numbers on these books from top to bottom of each piles in order of Q[1],Q[2],...Q[R],P[R]

**Input Format**

The first line contains two space separated integers, M and R.
The next line contains M space separated integers representing the initial pile of books, I.e., the leftmost value represents the bottom book of the pile.

**Output Format**

Output M lines. Each line contains a number written on the book. Printing should be done in the order defined above.

## Input-Output:

| Input | Output | Comments |
|---|---|---|
| 5 3<br>4 6 3 15 7 | **4**<br>**6**<br>**15**<br>**3**<br>**7** | **Explanation**<br>Initially:<br>P[0] = [4, 6, 3, 15, 7] <- TOP<br>**After 1st iteration:**<br>P[0] = []<-TOP<br>Q[1] = [6, 4]<-TOP<br>P[1] = [7, 15, 3]<-TOP<br>**After 2nd iteration:**<br>P[1] = []<-TOP<br>Q[1] = [6, 4]<- TOP<br>Q[2] = [3, 15]<-TOP<br>P[2] = [7]<-TOP<br><br>**After 3rd iteration:**<br>P[2] = []<-TOP<br>Q[1] = [6, 4] <- TOP<br>Q[2] = [3, 15] <- TOP<br>Q[3] = [ ] <-TOP |

| | | |
|---|---|---|
| | | P[3] = [7] <- TOP<br>We should output numbers in Q[1] first from top to bottom, and then output numbers in Q[2] from top to bottom and then P[3] from top to bottom. |
| 5 1<br>5 8 9 6 7 | **8**<br>**6**<br>**5**<br>**9**<br>**7** | **Explanation**<br>Initially:<br>P[0] = [5, 8, 9, 6, 7] <- TOP<br>**After 1st iteration:**<br>P[0] = []<-TOP<br>Q[1] = [6, 8]<-TOP<br>P[1] = [7, 9, 5]<-TOP<br>We should output numbers in Q[1] first from top to bottom, and then P[1] from top to bottom. |