**Detect Prime Numbers**

**Problem Statement:**

Given an integer array ***a*** of size ***N.*** For each integer in ***a*** we have to check if it is a prime number or not.

**Input Format:**

There is only one argument denoting integer array ***a***.

**Output Format:**

Return a string of size ***N***, where ith character of string contains ‘1’ if ***a[i]*** is a prime number else it should contain ‘0’.

**Constraints:**

1 <= ***a[i]*** <= 4 \* 10^6

1 <= ***N*** <= 3 \* 10^5

**Sample Test Case:**

**Sample Input:**

[6, 2, 5, 8]

**Sample Output:**

0110

**Explanation:**

6 is not a prime number. (6 = 2 \* 3)

2 is a prime number.

5 is a prime number.

8 is not a prime number. (8 = 2 \* 4)

**Notes:**

Maximum time allowed in interview: 20 Minutes.