Programming Basics Exam

Problem 6. Unique PIN Codes

Write a program that generates three-digit PIN codes, the digits of each PIN being within a certain interval. For a PIN to be valid, it must satisfy the following conditions:

- The **first** and **third** digits must be **even**.
- The **second** digit must be a **prime** number in the range **[2...7]**.

Input

You must read **3 lines** from the console:

- The **upper limit** of the **first number** - an **integer** in the range **[1...9]**
- The **upper limit** of the **second number** - an **integer** in the range **[1...9]**
- The **upper limit** of the **third number** - an **integer** in the range **[1...9]**

Output

Print **all valid three-digit PIN** codes on the console **with digits in the appropriate intervals**.

Sample Input and Output

Input	Output	Constrains
3 5 5	2 2 2 2 2 4 2 3 2 2 3 4 2 5 2 2 5 4	The first number is **3**, corresponding to the maximum value of the **first digit**. The second number is **5**, corresponding to the maximum value of the **second digit**. The third number is **5**, corresponding to the maximum value of the **third digit**. In all three-digit PIN codes we received our **first digit** is **2** because this is **the only possible even number.** Another **rule** applies to the **second digit**. We have to select **all the possible prime numbers** in the range from **2 to 7**. In our case, these numbers are as follows 2, 2, 3, 3, 5, 5. The **even number rule** applies to the **third digit** as well , and if we have a look at that digit, we will get that the possible numbers are: **2**, **4**, **2**, **4**, **2**, **4.**
8 2 8	2 2 2 2 2 4 2 2 6 2 2 8 4 2 2 4 2 4 4 2 6 4 2 8 6 2 2 6 2 4 6 2 6 6 2 8 8 2 2 8 2 4 8 2 6 8 2 8	

KINGSLAND UNIVERSITY
© Kingsland – https://kingslanduniversity.com. Unauthorized copy, reproduction or use is not permitted.
Follow us: