Power Progress

**Grade settings**: Maximum grade: 100  
**Disable external file upload, paste and drop external content**: Yes  
**Run**: Yes **Evaluate**: Yes  
**Automatic grade**: Yes

Andrews taught exponential multiplication to his daughter and gave her two inputs.

Assume, the first input as M and the second input as N. He asked her to find the sequential power of M until N times. For Instance, consider M as 3 and N as 5. Therefore, 5 times the power is incremented gradually from 1 to 5 such that, 3^1=3, 3^2=9,3^3=27,3^4=81,3^5=243. The input numbers should be greater than zero Else print “<Input> is an invalid”. The first Input must be less than the second Input, Else print "<first input> is not less than <second input>".

Write a Java program to implement this process programmatically and display the output in sequential order. ( 3^3 means 3\*3\*3 ).

**Note:**

In the Sample Input / Output provided, the highlighted text in bold corresponds to the input given by the user and the rest of the text represents the output.

Adhere to the code template, if provided.

**Sample Input 1:**  
3  
5  
**Sample Output 1:**  
3 9 27 81 243  
  
**Explanation:**Assume the first input as 3 and second input as 5. The output is to be displayed are based on the sequential power incrementation. i.e., 3(3) 9(3\*3) 27(3\*3\*3) 81(3\*3\*3\*3) 243(3\*3\*3\*3\*3)

**Sample Input 2:**  
-3  
**Sample Output 2:**  
-3 is an invalid

**Sample Input 3:**  
3  
0  
**Sample Output 3:**  
0 is an invalid

**Sample Input 4:**  
4  
2  
**Sample Output 4:**  
4 is not less than 2