Question:

Suppose that the sequence PRIO*R**I*T*Y***QUE****U*E (where a letter means to insert and an asterisk means to remove the maximum) is applied to an initially empty priority queue. Give the sequence of values returned by removing the maximum operations.

Solution:

Input		Queue				
Р	=>	Р				
R	=>	Р	R			
I	=>	Р	R	I		
0	=>	Р	R	I	0	
*	=>	Р	I	0		
R	=>	Р	I	0	R	
*	=>	Р	I	0		
*	=>	I	0			
I	=>	I	0	I		
*	=>	I	0			
Т	=>	I	0	Т		
*	=>	I	0			
Υ	=>	I	0	Υ		
*	=>	I	0			
*	=>	I				
*	=>					
Q	=>	Q				
U	=>	Q	U			
Е	=>	Q	U	Е		
*	=>	Q	Е			

*	=>	Е		
*	=>			
U	=>	U		
*	=>			
E	=>	E		