

DESCENDING

Given a positive integer N ($0 \leq N \leq 10^{16}$). Write a program to check if all digits in N are in descending order?

Input

an integer N ($0 \leq N \leq 10^{16}$)

Output

Write YES if all digits in N are in descending, otherwise write NO

Example

Input:

988765553200

Output:

YES

Input:

765587654321

Output:

NO