

A. Nearly Lucky Number

time limit per test: 2 seconds

memory limit per test: 256 megabytes

input: standard input

output: standard output

Petya loves lucky numbers. We all know that lucky numbers are the positive integers whose decimal representations contain only the lucky digits **4** and **7**. For example, numbers **47**, **744**, **4** are lucky and **5**, **17**, **467** are not.

Unfortunately, not all numbers are lucky. Petya calls a number nearly lucky if the number of lucky digits in it is a lucky number. He wonders whether number n is a nearly lucky number.

Input

The only line contains an integer n ($1 \leq n \leq 10^{18}$).

Please do not use the %lld specifier to read or write 64-bit numbers in C++. It is preferred to use the cin, cout streams or the %I64d specifier.

Output

Print on the single line "YES" if n is a nearly lucky number. Otherwise, print "NO" (without the quotes).

Examples

input	Copy
40047	
output	Copy
NO	
input	Copy
7747774	
output	Copy
YES	
input	Copy
1000000000000000000	
output	Copy
NO	

Note

In the first sample there are 3 lucky digits (first one and last two), so the answer is "NO".

In the second sample there are 7 lucky digits, 7 is lucky number, so the answer is "YES".

In the third sample there are no lucky digits, so the answer is "NO".

→ Attention

Package for this problem was not updated by the problem writer or Codeforces administration after we've upgraded the judging servers. To adjust the time limit constraint, solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then value 800 ms will be displayed and used to determine the verdict.

Codeforces Beta Round #84 (Div. 2 Only)

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Language: [Java 1.8.0_241](#)

Choose file: [Choose File](#) No file chosen

Be careful: there is 50 points penalty for submission which fails the pretests or resubmission (except failure on the first test, denial of judgement or similar verdicts). "Passed pretests" submission verdict doesn't guarantee that the solution is absolutely correct and it will pass system tests.

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Submission	Time	Verdict
132624549	Oct/21/2021 17:20	Accepted
132624180	Oct/21/2021 17:16	Wrong answer on test 17
132623588	Oct/21/2021 17:11	Wrong answer on test 4

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implementation *800

No tag edit access

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