

[HOME](#) [TOP](#) [CATALOG](#) [CONTESTS](#) [GYM](#) [PROBLEMSET](#) [GROUPS](#) [RATING](#) [EDU](#) [API](#) [CALENDAR](#) [HELP](#)
[PROBLEMS](#) [SUBMIT](#) [STATUS](#) [STANDINGS](#) [CUSTOM TEST](#)

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

The 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, a solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then the value 800 ms will be displayed and used to determine the verdict.

Codeforces Beta Round #84 (Div. 2 Only)

[Finished](#)
[Practice](#)


→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

[Start virtual contest](#)

→ Clone Contest to Mashup

You can clone this contest to a mashup.

[Clone Contest](#)

→ Submit?

Language: Python 3.8.10
 Almost always, if you send a solution on PyPy, it works much faster

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

[Submit](#)

→ Problem tags

[implementation](#) [*800](#)

No tag edit access

→ Contest materials

- Announcement



[Codeforces](#) (c) Copyright 2010-2022 Mike Mirzayanov
The only programming contests Web 2.0 platform
Server time: Aug/08/2022 21:32:11^{UTC+4.5} (i2).
Desktop version, switch to [mobile version](#).
[Privacy Policy](#).

Supported by



ITMO UNIVERSITY