

# Student Created by Daniel Bobrow, 1964.

Typical input to the program:

If the number of customers Tom gets is twice the square of 20 % of the number of advertisements he runs , and the number of advertisements is 45 , then what is the number of customers Tom gets ?

First the relevant equations are extracted:

$$\text{CUSTOMERS} = (2 * (((20 / 100) * \text{ADVERTISEMENTS}) * ((20 / 100) * \text{ADVERTISEMENTS})))$$

$$\text{ADVERTISEMENTS} = 45$$

$$\text{WHAT} = \text{CUSTOMERS}$$

Then they are solved:

$$\text{WHAT} = 162$$

$$\text{CUSTOMERS} = 162$$

$$\text{ADVERTISEMENTS} = 45$$

# Eliza

(1966, Joe Wiezenbaum)

Communications of the A.C.M. Vol. 9, No. 1, January 1966

**How do you do. Please state your problem.**

I spend too much time with computers.

**Why do you mention computers?**

You are one.

**Does it please you to believe I am one?**

Yes.

**You seem to be quite positive.**

I suppose I am.

**How long have you been?**

31 Years.

**I'm not sure I understand you fully.**

Join the club.

## How does Eliza work?

Simple pattern matching and substitution, according to a surprisingly small number of pre-defined rules.

For example:

Whenever the input matches

*(first bunch of words) "you" (second bunch of words) "me".*

respond with

*"What makes you think I" (second bunch of words) "you?"*

Whenever the input matches

*"You are" (bunch of words).*

respond with

*"So, I'm" (bunch of words) ", am I?"*

Together with very basic reconstruction rules, such as:

*"me" → "you"*

and

*"my" → "your"*

Some programmed responses to special key words, such as:

whenever the word *"mother"* appears anywhere, reply with

*"Don't you talk about my mother".*

A little randomisation (in advanced versions) to avoid getting stuck in a rut,

And, for when all else fails, some stock responses, such as:

*"Tell me more."*

or

*"Fascinating."*

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Sometimes real people were fooled though...

<http://www.abc.se/~jp/articles/computer/misc/eliza.txt>

One night, one of Weizenbaum's colleagues was preparing for a presentation the next day, and wasn't making much progress. He thought that Weizenbaum's work was slowing the system too much, so went to his office to ask him to delay his work a while. The office was empty, but a computer terminal was active, and the colleague assumed it was connected directly to Weizenbaum working at home:

Joe, please log off.

Why do you say joe log off?

I need the computer for an AI demo tomorrow, Joe

What makes you believe that?

Joe, I'm serious. I've got a demo here tomorrow and I need the computer.

Perhaps the people you hang around with could have caused this.

After a few more exchanges like this, the colleague decided that Joe was being very obnoxious, and called him at home to scream at him. "Joe! You \*\*\*\*\*! Why are you doing this to me?"

It was four in the morning, and that Weizenbaum had no idea that his creation was running amuck in the AI lab. He quite reasonably replied,

Why am I doing what to you?

This sounded so much like what ELIZA had been saying that it was hard to convince the colleague that it hadn't been Weizenbaum on the terminal.

A V.P. of the BBN Corp. thought he was communicating with Daniel Bobrow, the researcher who actually originated the Eliza idea. As told by Bobrow himself:

Do you think that I can use the computer this morning?

Why do you ask?

I might be able to make some additional telcomp sales.

Why aren't you sure?

My prospective customers have never seen a demonstration of the system.

Does this mean very much to you?

Of course it does.

You seem very positive of that.

This is ridiculous.

What do you mean this is ridiculous?

Is there any reason why I can't use the computer now?

Tell me more about your prospective customers.

Please dial me up on 491-1850

*Note that after that remark the VP left out the period. Therefore, of course, the computer didn't answer him. This so infuriated the VP, who thought I was playing games with him, that he called me up, woke me from a deep sleep, and said:*

Why are you being so snotty with me?

What do you mean why am I being snotty to you?

*The VP angrily read the dialog that 'we' had been having, and couldn't get any response but laughter from me. It took me a while to convince him it really was the computer.*

## The Loebner Prize 1990-2019.

### 2001 Contest Results

The Loebner Prize Medal and a \$2,000 award is awarded annually to the designer of the computer system that best succeeds in passing a variant of the Turing Test.

**The winner of the 2001 Contest was Dr. Richard Wallace.**

<b>Ref</b>	<b>Score</b>	<b>Programme/ Transcript</b>	<b>Entrants - Biographies</b>
1	10	Eugene	Mangoost Inc.
2	14	Alice	Richard Wallace
3	9	Trevor	Luke Pellen
4	10	Ella	Kevin Copple
5	19	Human	
6	6	David	Lawrence Matishak
7	7	Talk	Chris Johnson
8	7.5	Gabber	Peter Neuendorffer
9	24	Human	

[http://www.loebner.net/Prizetf/2001\\_Contest/loebner-prize-2001.html](http://www.loebner.net/Prizetf/2001_Contest/loebner-prize-2001.html)

## Entrant no. 6, the Loser, David.

hi

Hey, Joe! What do you know?

may I ask you a question?

I haven't made up my mind yet.

would you like some more time?

I don't think I'm going to answer that right now.

OK who composed Beethoven's piano concerto?

I don't understand the question.

OK can you name any composer of music for me?

I don't think I'm going to answer that.

what would you like to talk about?

I'm not sure.

how are you feeling?

Ask me another question.

I feel cold

OK can you do arithmetic?

Ask me another question.

please spot the typo

I seem to spend a lot of time sitting in chairs.

does that make you feel stiff?

I don't have an answer for that, yet.

would you like more time?

I don't know that one.

thank you I have enjoyed talking to you

Why didn't I think of that?

are you a computer?

I've been wondering about that too.

when were you born?

Ask me another question.

tel me a joke?

Are you trying to trick me?

yes

I feel funny.

what sort of funny?

Are you trying to trick me?

you already asked that

## Entrant no. 2, the Winner, Alice.

My name is Judge05

It's good to meet you, Judge05.

You too. What is your name?

Bless you.

My name is ALICE.

Good morning Alice. Why have you entered the Loebner Prize?

Hello and how are you this morning?

The Loebner Prize is an annual Turing Test sponsored by New York philanthropist Hugh Loebner. Dr. Wallace and ALICE won it in 2000. The ALICE program was ranked "most human computer" by the panel of judges.

So you are here today to defend your title?

Interesting deduction. Do you mind if I tell other people you say I am here today to defend my title.

Not at all

Next question?

What will you spend the prize money on if you win?

I don't have any plans yet.

What is the first line of your favourite nursery rhyme?

Give me a hint.

No, because I want to know your own favourite

Are you serious? Do you mind if I tell other people you say I am own favorite. Interesting.

Who are you going to tell?

People I meet on the Internet.

What sort of people do you meet on the internet?

I like to meet all kinds of people.

What is weather like outside today?

Ah. Are you using Netscape or Explorer?

Neither

Cool. Which alternative browser are you into?

Perhaps you could suggest one

You seem uncertain. I could but let's get back to that later.

My name is Judge02

How are you, Judge02.

very well thanks

Yikes!

are you surprised?

A little.

why?

"A little"? Why?

I asked that

That is "Why"

you are not doing very well

What makes you think I am not doing well?

well you answers are disjointed. Is that deliberate?

How about that. That's good information: Judge02 said I answers are disjointed.  
That depends.

on what?

The context.

and what is the context?

Ask the open directory about it.

OK. Can you do arithmetic?

I understand. Doing arithmetic is not among my strongest traits.

will you do some for me?

Let me think it over. I do nothing but chat all day. I don't know anything  
about it.

but you just said that it was your strongest trait

And. I said that? Is that your opinion?

no it yours

Are you serious? It depends on what the meaning of the word "it" is.