# Project 1. Conversational agent

One of the earliest examples of a *conversational* agent, or a chatterbox, is Joseph Weizenbaum's Eliza (written in the LISP language). It is considered a first attempt to approach the Turing test's paradigm.

Eliza is a very straightforward program – it simply rephrased the input back to the human, typically in the form of a question.

Here is an example of Eliza imitating a psychiatrist talking to a patient:

**Patient: I'd like to talk about my mother.**
Eliza: What else comes to mind when you think of your mother?
**Patient: She wants to control me and run my life.**
Eliza: Your life?
**Patient: Yes, there are times that I have one.**
Eliza: You are sure.
**Patient: Why don't you think I have a life?**
Eliza: Do you believe I don't think you have life?

Obviously, Eliza just looked for patterns, and then rephrased, or picked a random comment.

**Task 1.**

Write a simple program implementing this or a similar dialog. Use a programming language of your choice.

Include your code, a screenshot of a dialog and a brief comment.

**Task 2.**

Look up for descriptions of such programming tools as LISP and productions systems to see how they can be applied to implementation of a general algorithms of conversational agents.

Include a one-page discussion and suggestions on this subject.

Submit your work to the Beachboard by Friday September 9, 11:59 pm.