

CS 406-01: Unstructured Information Processing

HW 1 (Given August 28, 2019; Due Sept. 4, 2019)

Email your answers to the TA before midnight on the day it is due

Numbers in the parentheses indicate points allocated to the question.

1. Regular expressions can be used to create the perception of a machine that understands text. That perception is not completely unfounded as a lot can be done using just regular expressions.

In this homework, you are to design a Question-Answer bot that a typical bank might deploy. For simplicity, assume that the bank only has 2 facilities – an account (savings or checking) and a credit card. A user can interact with the Bot to (i) enquire about the balance in the account, (ii) enquire about the outstanding in the credit card account, (iii) any payment that is due on the credit card and by when. If the user asks something else, you should respond by saying that “I can’t answer that. Please contact the branch”.

The figure of merit for this assignment are the number of variations that you can correctly accommodate so try to handle as many cases as you can.

You can program in any language in your choice and should have a simple line based interface where a query can be typed and the system responds with the answer. (40 points)