## CK0031: Homework 00

Exercise 00.01 (1.1 AIMA3). Define in your own words:

- a) intelligence;
- b) artificial intelligence;
- c) agent;
- d) rationality;
- e) logical reasoning.

**Exercise 00.02 (1.3 AIMA3).** Are reflex actions (such as flinching from a hot stove) rational? Are they intelligent? [Max one half (1/2) of a page, using regular font sizes and line spacing.]

**Exercise 00.03 (1.9 AIMA2).** Why would evolution tend to result in systems that act rationally? What goals are such systems designed to have? [Max one half (1/2) of a page, using regular font sizes and line spacing.]

**Exercise 00.04 (1.11 AIMA3).** 'Surely computers cannot be intelligent - they can do only what their programmers tell them.' Is the latter statement true, and does it imply the former? [Max one half (1/2) of a page, using regular font sizes and line spacing.]

**Exercise 00.05 (1.12 AIMA3).** 'Surely animals cannot be intelligent - they can do only what their genes tell them.' Is the latter statement true, and does it imply the former? [Max one fourth (1/4) of a page, using regular font sizes and line spacing]

**Exercise 00.06 (1.13 AIMA3).** 'Surely animals, humans and computers cannot be intelligent - they can do only what their constituent atoms are told to do by the laws of physics.' Is the latter statement true, and does it imply the former? [Max one eighth (1/8) of a page, using regular font sizes and line spacing.]