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CSE 3521

Homework #1

1. "Surely computers/machines cannot be intelligent—they can only do what their programmers tell them." Is the latter statement true, and does it imply the former? Briefly justify your answer.
    a. The latter statement is not true, the famous example is AlphaGo, it is impossible to hard code every movement for computers/machines to play the Go which is a good counter-example. However, the latter statement cannot imply the former because the computers/machines were not receiving any direct instructions from external, but they proved their intelligence by defeating human beings.
    b. In another perspective, the latter statement can also be true since the computers/machines cannot do anything without human interference, it did not develop the intelligence by themselves and it can be used to imply the former.
2. "Surely animals cannot be intelligent—they can only do what their genes tell them." Is the latter statement true, and does it imply the former? Briefly justify your answer.
    a. The latter statement is also not true, because animals can learn from other animals or adapt to the environment by itself. That's how their genes are getting evolved by natural selection. The latter statement does not imply the former because the animals are intelligent.
3. How do your answers to 1 & 2 compare and why?
    a. Compare to answers from questions 1 & 2, there is the fundamental difference between machines and animals because animals have their own neural systems, but the machine doesn't. The intelligence from the machine is given by programmers, animal's intelligence is coming with birth.