

SERIES NUM. 01

Exercise 01

1. Define in your own words:

- (a) Intelligence
- (b) Artificial intelligence
- (c) Agent

2. AI is used in:

- (a) Finance
- (b) Robotics
- (c) Games
- (d) Medicine
- (e) Internet
- (f) None of these areas

Exercise 02

An AI approach is called:

- (a) Wetware.
- (b) Formula.
- (c) Intelligent agent.

Exercise 03

Study the AI literature to determine if current computers can do the following:

- (a) Play ping pong.
- (b) Driving within Cairo center.
- (c) Buy a week's provisions at the supermarket.
- (d) Buy a week's provisions on the web.
- (e) Discover and demonstrate new mathematical theorems.
- (f) Write an intentionally funny story.
- (g) Provide relevant advice in a specialized legal area.
- (h) Translate in real time from spoken English to Swedish.
- (i) Perform a complex surgical operation.

For tasks that are currently impossible, try to determine the difficulties they present and predict when they can be overcome (if it is possible).

Exercise 04

Are reflex actions (like removing your hand from a hot stove) rational? Are they intelligent actions?

Exercise 05

“Computers cannot be intelligent; they can only do what their programmers tell them to do” is the last proposition true and does it logically entail the first?

Exercise 06

“Animals cannot be intelligent; they can only do what their genes command them to do” is the last proposition true and does it logically lead to the first?

Exercise 07

“Animals, humans and computers cannot be intelligent; they can only do what the laws of physics command their atoms to do” is the last proposition true and does it logically entail the first?

Exercise 08: Test your intelligence (J. Searle method)

Given the following English-Chinese dictionary:

Question	Answer
What are your hobbies?	Sport, Internet, reading, listening music
Who is your preferred teacher?	
你多大了？	20年。
你快乐吗？	不太好。
你在学习什么？	计算机科学听我说
同比感谢非常	
再见	

Answer the following questions:

1. Hello, what's your firstname?
2. What's your lastname?.....
3. Where are you working?
4. 你多大了？
5. Do you speak English ?.....
6. 你在学习什么？
7. Are you a good student ?.....
8. 你快乐吗？
9. 同比感谢非常
10. 再见

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