Problem Set 7, Problems 0 and 1

Problem 0: Reading and response

Put your response to the reading below.
IMPORTANT: Your entire response should fit on this page.

What are the advantages and disadvantages of pursuing a strategy of evolving programs to solve problems, rather than writing them for a specific task?

The article introduces the history of evolving programs, the pros and cons of it, and the example of how it can be improved from now on. The advantages of the evolving programs are that programs, which inspired from animal algorism, can adapt to the situation, which the initial programs were not prepared for the system. For example from the article, when the four legs robot lost one leg and become three legs, the robot adapts to the situation and re-evolve to a system with three legs and change the system to use only three legs. Then the next - generation adaptive machines reflect the previous system and use it as the next better brain.

For the disadvantages of evolving program is that it took such a long time to reflect the previous system and become the better one. Some scientist saying the evolving time of programs takes such a long time, so it would be better at time uses wise to just create a new system. It can be the right thing I would say for them to pursue time benefit wise solution, but I think the AI will be a better way since it does need human hands to make it better. They can just learn without any help.

Problem 1: Working with nested loops and 2-D lists
IMPORTANT: This heading should appear at the very top of the second page.

1-1

x	range(1, x)	y	value printed
2	[1]	1	3
4	[1,2,3]	1	5
4	[1,2,3]	2	6
4	[1,2,3]	3	7
6	[1,2,3,4,5]	1	7
6	[1,2,3,4,5]	2	8
6	[1,2,3,4,5]	3	9
6	[1,2,3,4,5]	4	10
6	[1,2,3,4,5]	5	11
6		5	6 5

1-2

a)twoD[2][1]

b)
```
for r in range(len(twoD)):
    print(twoD[r][2])
```

c)
```
for i in range(len(twoD)):
    print(twoD[i][i])
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