William Poole

Zachary Hutchinson

COS 125

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1.

To make a computer program, I would do something simple. Maybe, like an adder. So, a user would enter a number and then another and the program would do the rest. So, It would look like the code below:

A=userinput %allows user input for one term

B=userinput %allows user input for one term

C=A+B %adds

Print(C) %shows answer

Result:

>>> 4 %sets A equal to 4

>>> 3 %sets B equal to 3

7 %the program will run the calculation and then immediately print the answer.

2.

Where I start I drop a penny, and at the end of hall I drop another marking it's a path I went down. If it's a dead end denote the exit with an additional penny to indicate a dead end. So a line of singles denote the path, double marks dead. Once at the end three or more to denote the end of the path. So, after you leave there is a line of singles from start to finish where there are three. To fight against loops once you stay on a single pennies for two long back up placing x's with pennies on the floor denoting where you have been in the loop. If you start with an x back up and find a new path or back up till you notice an area with new paths.

3.

Move to B

Scan top

if it is one grab and move to C and release %checking top of B

Move to A

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Scan top
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if it is one grab and move to C %checking top of A

else:

move and stack ontop of B

Scan remaining A

If one move and stack in C

else:

Move top two of B into A and place last A in C % one is placed by now

Scan top A % three in this tower

If 2 place in stack C: %top is 2

Else: place in B

Scan top A

If 2 place in stack C: %second is two

Else: place in B

Grab last A place in C % two is placed

Scan B % two left (3and4)

If it is 3 place in C %first option

Grab last in B and stack%4 is stacked

Else: place in A

Grab last in B and place in stack C % 3 is placed by here

Grab A and place %4 is stacked