

CAIS 117: Intro to Programming with Python

Fall 2023

Homework 05: Magic 8 Ball

Homework is DUE before class on the day indicated on the course schedule.

This is a pair assignment. *You should complete it and submit it with a partner.*

Learning Objectives:

- Implement loops
- Utilize RNG

Part 1 - coding

Your submission will be auto graded for correctness and graded by hand for appropriate commenting, structure, etc. (see rubric below). **For the auto grader, it's important that your input goes in the prescribed order, and your output is formatted exactly like the examples below.** Remember to check the results of the auto grader tests to help debug your program.

In this assignment, you will write a python program that simulates a Magic 8 Ball. Your program should:

- Take in a question from the user with the prompt: "Type a question: "
- Print a randomly selected response from the options in the table below
- Determine if the user wants to ask another question with the prompt: "Type another question (EXIT to quit): "
- If the user types **any** variation of exit, at **any** time, the program should quit with the message: "Thanks for playing!"
- Otherwise, keep playing

Examples:

```
>_ Console x Shell x +
Type question: Did I do this correctly?
Yes
Type another question (EXIT to quit): EXIT
Thanks for playing!
>
```

```
>_ Console x Shell x +
Type question: Did I do this correctly?
Signs point to yes
Type another question (EXIT to quit): What signs?
My sources say no
Type another question (EXIT to quit): Can you explain?
My reply is no
Type another question (EXIT to quit): Exit
Thanks for playing!
>
```

Magic 8 ball answers:

Affirmative Answers	Non – Committal Answers	Negative Answers
It is certain	Reply hazy, try again	Don't count on it
It is decidedly so	Ask again later	My reply is no
Without a doubt	Better not tell you now	My sources say no
Yes definitely	Cannot predict now	Outlook not so good
You may rely on it	Concentrate and ask again	Very doubtful
As I see it, yes		
Most likely		
Outlook good		
Yes		
Signs point to yes		

Reflection

In a word document please answer the following questions with your partner:

- a) What part of this assignment was trickiest for you and your partner?
- b) How did you tackle that tricky part?
- c) What did each partner contribute to the final product?

Submission

Submit your assignment on repl.it (as a group). In addition, save your reflection as a PDF and submit it on PLATO (as a group).

Rubric

Function		
	Passes auto grader tests	0 - 10
Commenting		
	Appropriate header with names, date, program description	0 - 2
	Code is well documented, but not over documented	0 - 2
Structure		
	Problem is broken into reasonable chunks	0 - 2
	Variable names are descriptive	0 - 2
	Functions are used appropriately	0 - 2
Reflection		
	All questions answered thoughtfully	0 - 5