Welcome to the CoGrammar

Iteration and Logical Operators

The session will start shortly...

Questions? Drop them in the chat. We'll have dedicated moderators answering questions.

Cyber Security Session Housekeeping

- The use of disrespectful language is prohibited in the questions, this is a supportive, learning environment for all - please engage accordingly. **(Fundamental British Values: Mutual Respect and Tolerance)**
- No question is daft or silly - **ask them!**
- There are **Q&A sessions** midway and at the end of the session, should you wish to ask any follow-up questions. Moderators are going to be answering questions as the session progresses as well.
- If you have any questions outside of this lecture, or that are not answered during this lecture, please do submit these for upcoming Academic Sessions. You can submit these questions here: **Questions**

Cyber Security Session Housekeeping cont.

- For all **non-academic questions**, please submit a query: **www.hyperiondev.com/support**
- We would love your **feedback** on lectures: **Feedback on Lectures**
- Find all the lecture **content** in you **Lecture Backpack** on GitHub.

Safeguarding & Welfare

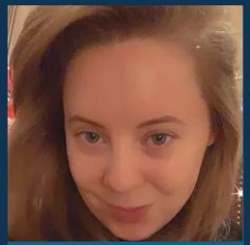
We are committed to all our students and staff feeling safe and happy; we want to make sure there is always someone you can turn to if you are worried about anything.

If you are feeling upset or unsafe, are worried about a friend, student or family member, or you feel like something isn't right, speak to our safeguarding team:

Ian Wyles
Designated Safeguarding Lead

Simone Botes

Rafiq Manan



Charlotte Witcher

Nurhaan Snyman

Ronald Munodawafa

Tevin Pitts

Scan to report a safeguarding concern

or email the Designated Safeguarding Lead:
Ian Wyles
safeguarding@hyperiondev.com

CoGrammar HyperionDev

Learning Objectives & Outcomes

- Utilise logical operators to create more complex conditions.
- Create continuous loops using while loops.
- Create code that loops a set amount of times using for loops.

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Iteration and Logical Operators

April 2024

Control Structures

In which scenarios would you use logical operators(and, or, not)?

Control Structures

In which scenarios would you use while and for loops?

Polls

Please have a look at the poll notification and select an option.

What does the logical operator 'and' do in Python?

A. Returns True if all expressions are True
B. Returns True if at least one expression is True
C. Returns False if all expressions are True
D. Always returns False

Polls

Please have a look at the poll notification and select an option.

What is the output of the following code?

A. 0 1 2
B. 0 1 2 3
C. 1 2 3
D. 0 1

```
count = 0
while count < 3:
    print(count)
    count += 1
```

Number Guessing Game

The program picks a random number between 1 and 100, and the user has to guess it. After each guess, the program tells the user if the guess is too high, too low, or correct. The game continues until the user guesses correctly.

Multiplication Table Generator

The program asks the user for a number and then prints the multiplication table for that number up to 12.

Simple Voting System

The program prompts users to vote for one of four candidates (e.g., "A" or "B"). The program keeps asking for votes until a stopping condition (e.g., reaching a predefined total number of votes). At the end, it announces the winner.

Password Strength Checker

Create a program that takes a password input from the user and checks if it contains at least one uppercase letter, one lowercase letter, and one digit. The program should keep asking for a valid password until all conditions are met.

Summary

- We can use logical operators to create more complex conditions by adding multiple expressions.
- Iteration structures allow us to do repetitive tasks within a range or until a condition is met.

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Questions and Answers

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Thank you for attending

SKILLS FOR LIFE
SKILLS BOOTCAMPS

Department for Education

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