




Welcome to the CoGrammar

Strings, Lists and Functions

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



Nurhaan Snyman



Rafiq Manan



Ronald Munodawafa



Tevin Pitts

Scan to report a
safeguarding concern



or email the Designated
Safeguarding Lead:
Ian Wyles

safeguarding@hyperiondev.com

Stay Safe Series:

Mastering Online Safety One Week/step at a Time

While the digital world can be a wonderful place to make education and learning accessible to all, it is unfortunately also a space where harmful threats like online radicalisation, extremist propaganda, phishing scams, online blackmail and hackers can flourish.

As a component of this BootCamp the **Stay Safe Series** will/is designed to guide you through essential measures in order to protect yourself & your community from online dangers, whether they target your privacy, personal information or even attempt to manipulate your beliefs.

Security Reminder

Stay Vigilant and Practice Safe Habits

- Biggest security risk is often human error.
- Stay vigilant by following the basics
 - Never share your passwords
 - Double-check any suspicious links or emails
 - Avoid unknown public Wi-Fi networks without using a VPN.
 - Cybersecurity is as much about good habits as it is about technology.



Learning Objectives & Outcomes

- Identify and apply basic operations on lists and strings
- Use common list and string methods to manipulate and format data in Python.
- Define and call functions with parameters and return values.
- Combine lists, strings, and functions to solve simple programming problems.



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Strings, Lists and Functions

October 2024

Strings, Lists and Functions

What's the difference between a function that prints a value and a function that returns a value? When would you use each?



Strings, Lists and Functions

How would you write a function that takes a list of numbers and returns the largest number?

1 2 3
4 5 6
7 8 9 0

Polls

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

Which of the following statements is true about lists in Python?

- A. Lists can contain elements of only one data type.
- B. Lists are immutable like strings.
- C. Lists are ordered and allow duplicate elements.
- D. Lists cannot be nested within other lists.

Polls

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

Which keyword is used to define a function in Python?

- A. function
- B. define
- C. def
- D. lambda

Activity

Create a program that allows users to **maintain** a collection of **movies** with **reviews** and **ratings**. Users can **add** new movies, **update** ratings or reviews, **search** for a movie, and **display** movies sorted by their ratings.

Features:

- Add a new movie with its title, review, and rating.
- Update the review or rating for an existing movie.
- Search for a movie by its title.
- Display all movies, optionally sorted by their ratings (highest to lowest).
- Remove a movie from the collection.

Polls

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

What does the return statement do in a Python function?

- A. It ends the program.
- B. It outputs the function's result and exits the function.
- C. It prints the result to the console.
- D. It defines the function's parameters.

Polls

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

What is true about variables defined inside a function in Python?

- A. They are accessible outside the function.
- B. They are global by default.
- C. They have local scope and exist only inside the function.
- D. They are immutable by default.

Questions and Answers



Thank you for attending



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