



COMP 150: Review - Thank You!

Week 15, Lecture 22



Agenda

1. Attendance
2. Remaining Due Dates
3. MT II Grades
4. Review
5. Course Evaluations

Remaining Dates

- Today: Review
- Friday, April 24: “Final” Exam (instead of during the course slot)
 - Same format as MT II
- Friday, May 1: Final Exam Slot
 - By popular demand: we are not meeting during this course’s final exam slot
 - Due: Crypto Lab
 - Due: Paper
- Reminders:
 - All grades getting released tomorrow - including placeholders for project, paper, and presentation
 - Please check them over for accuracy
 - If I continue to struggle with Sakai, I will email these details to you!
 - May 1, 11:59 PM AoE is the drop-deadline for this course - anything submitted after this cannot be accepted. Please check your submissions!
 - Finally - please complete your online course evaluations so I can improve!

Project and Paper

● Project

- Change in plans - given course feedback, we will review instead of the last day of the project!
- Turn in Days 1 and 2 (including the report) by *this* Friday, 11:59 PM AoE
- Originally-planned work for today is posted - feel free to do this individually!

● Paper

- 10% Semester Grade
- Due 1 May 2026, 11:59PM AoE
- 2,000 words
- Rubric and samples posted

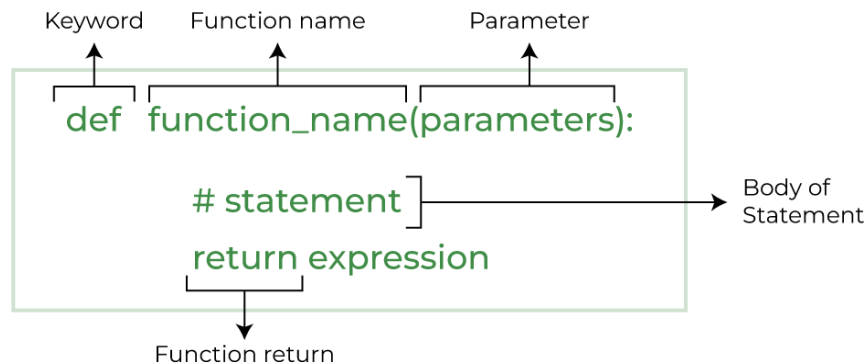
MT II - Let's Review!

Written:

1. Describe arguments in Python functions. What are positional arguments? What does it mean to default an argument? In what order should positional and default arguments be used? What are keyword arguments, and what problem do they solve?
2. Describe some advantages and disadvantages of using Python to do data analytics. This can be subjective, but your answer must include precise information and examples!
3. Describe two types of cyber attacks. What are they called, how do they generally work, and what is the typical goal of the attack?

Parts of a Function

- **def:** “This is a function”
- **Name:**
 - Use underscores to connect multiple words
 - Cannot begin with a number or special character
- **Parameter:**
 - Define things (arguments) we pass into the function
- **Body:**
 - Indented (“whitespace”) to indicate scope
- **Return:**
 - Once the code finishes, send back some value



Function Arguments

- Arguments:

- Data we pass into a function

- Positional:

- Come first in the order
 - Are required

- Default:

- Add a value to a positional argument; if it isn't provided, the default is used in its place
 - No longer required
 - Come after positional arguments

- Keyword:

- Given by name
 - Make it so we can call arguments out of order or skip over some defaults

Function Arguments

```
def other_function(argument_a, argument_b, argument_c = "default for C", argument_d = 10):
```

```
other_function("AAA", "BBB")  
other_function("AAA", "BBB", "CCC")  
other_function("AAA", "BBB", "CCC", "DDD")
```

```
other_function("AAA", "BBB")  
other_function("AAA", "BBB", "CCC")  
other_function("AAA", "BBB", argument_d = "DDD")  
other_function(argument_b = "BBB", argument_a = "AAA")
```


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Types of Attacks

Major Cyber Attacks		Malware Attacks	Harmful software damages system
		Phishing Attacks	Fake messages steal information
		Ransomware Attacks	Data locked for money
		DDoS Attacks	Too much traffic attack
		SQL Injection	Database commands misused
		Zero-Day Exploits	Unknown security weakness exploited