Question 1
What types of errors might you encounter while debugging code? Select three answers. 1 / 1 point
Exceptions
Correct
Syntax errors, logic errors, and exceptions are all types of errors you might encounter while debugging code. Syntax errors involve invalid usage of the Python language. Logic errors may not cause error messages, but they produce unintended results. Exceptions happen when the program does not know how to execute code even though it is syntactically correct.
Logic errors
Correct
Syntax errors, logic errors, and exceptions are all types of errors you might encounter while debugging code. Syntax errors involve invalid usage of the Python language. Logic errors may not cause error messages, but they produce unintended results. Exceptions happen when the program does not know how to execute code even though it is syntactically correct.
Syntax errors
Correct
Syntax errors, logic errors, and exceptions are all types of errors you might encounter while debugging code. Syntax errors involve invalid usage of the Python language. Logic errors may not cause error messages, but they produce unintended results. Exceptions happen when the program does not know how to execute code even though it is syntactically correct.
Iteratives

Question 2
The purpose of this code is to indicate whether a particular operating system needs to be updated. However, it contains a syntax error. Run this code, analyze its output, and then debug it. (If you want to undo your changes to the code, you can click the Reset button.)

```
12345
operating_system = "OS 2"
if operating_system == "OS 1":
   print("updates needed")
elif operating_system == "OS 2":
   print("no updates needed")
```

Reset
no updates needed
Based on what you discover, how can you fix the error?
1 / 1 point

Use single equals signs (=) and not double equals signs (==).
Change the keyword elsif to elif.
Indent the elsif statement.
Remove all colons (:).
Correct
When you run this code, the error message can help you identify the syntax error and the line number where it occurs. Changing the keyword elsif to elif will fix the error. Syntax errors involve invalid usage of the Python language, such as misspelling a keyword. The correct spelling for the keyword needed before the condition operating_system == "OS 2" is elif.

Question 3
You have written code that assigns security incident tickets to the appropriate cybersecurity team based on its priority level. If the priority level is 1, it should get forwarded to Team A. If the priority level is 2, it should get forwarded to Team B. When testing your code, you notice that an incident with priority level 2 is forwarded to Team A instead of Team B. What type of error is this? 1 / 1 point
Name error
Exception
Logic error
Syntax error
Correct
This is a logic error. Logic errors are errors that result when the logic used in code produces unintended results. In this situation, because the security incident ticket is forwarded to the wrong team, there is an unintended result.

Question 4
You have written code that uses a search algorithm to find an employee's IP address. When testing your code, an error message indicates that an unknown index is being accessed. What type of error is this? 1 / 1 point

Exception
Logic error
Syntax error
Iterative

Correct
This is an exception. Exceptions occur when Python does not know how to execute code even though it is syntactically correct. This happens if you ask Python to access an index that does not exist.