#### Question 1

What is debugging? 1 / 1 point

The practice of calling a function from multiple places in a larger program

The practice of improving code efficiency.

The practice of identifying and fixing errors in code.

The practice of improving code readability.

Correct

### Question 2

The purpose of the following code is to print the characters in a device ID. 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.)

```
device_id = "p35rv47"
for char in device_id:
    print(char)
p
3
5
r
v
4
7
What is the error related to? 1 / 1 point
```

A misspelled variable

A missing colon (:)

A missing double equals sign (==)

A missing quotation mark (")

Correct

# Question 3

The purpose of the following code is to iterate through a list and print a warning message if it finds "user3" in the list. Run this code, analyze its output, and debug it. (If you want to undo your changes to the code, you can click the Reset button.)

```
list = ["user1", "user2", "user3", "user4"]
for user in list:
    if user == "user3":
        print("Warning: user3 should not access the system.")
```

Warning: user3 should not access the system.

How can you fix the error? 1 / 1 point

### Change the != operator to the == operator in the conditional.

Change "user3" to "user2" in the conditional.

Change the indentation so that the line that prints the warning is not indented.

Change "user3" to "user1" in the conditional.

Correct

#### Question 4

You included username\_list[10] in your code, but username\_list only contains five elements. What type of error is this? 1 / 1 point

### Exception

Logic error

Syntax error

Name error

Correct

#### Question 5

Why might you use print statements when debugging code? 1 / 1 point

To identify which sections of the code are working properly

To create error messages

To prevent errors from occurring

To add missing syntax to the code

Correct

#### Question 6

What does the following code do?

with open("logs.txt", "r") as file: 1 / 1 point

It copies a file called "logs.txt" into a new file "r".

It opens a file called "logs.txt" in write mode and stores it in a variable called file.

It opens a file called "logs.txt" in read mode and stores it in a variable called file.

It copies a file called "r" into a new file "logs.txt".

Correct

### Question 7

What does the following code do? logins = "pwashing jhill tshah"

usernames = logins.split()

1/1 point

Removes the blank spaces that split the usernames in the variable logins and stores the string in the variable usernames

Splits a string variable called logins into single characters

Splits a string variable called logins into a list of strings and stores it in the variable usernames Removes the last username in the logins variable and stores the string in the usernames variable Correct

### Question 8

What is the process of converting data into a more readable format? 1 / 1 point

Slicing

**Splitting** 

Debugging

**Parsing** 

Correct

Question 9

After you've opened a log file as file, which line of code will help you read the file into a variable called text?1 / 1 point

text.read(file)

text = read(file)

text = read(file, "r")

text = file.read()

Correct

## Question 10

You want to check if a device is running a particular operating system that needs updates. Devices that contain a substring of "i71" in their device ID are running this operating system. First, you want to read in a log file that contains the device ID for all devices and convert it into a string. You should then parse this string into a devices list. Then, you should separate all device IDs that contain the substring "i71" into a separate list called updates\_list. If you want to automate this through Python, what would be part of your code? Select three answers. 1 / 1 point

A for loop to iterate through all items in the devices list

Correct

A split() function to split the string containing the information in the log file into a devices list Correct

An if statement that checks if elements in devices contain the substring "i71"

Correct

A counter variable to keep track of the number of devices containing the substring "i71"