MATLAB Quiz 6

Total points 10/10

The respondent's email (**amlali98eg@gmail.com**) was recorded on submission of this form.

✓ 1: What is the purpose of a while loop in MATLAB? *   1/1

○ a) To create a conditional statement

○ b) To execute a block of code a fixed number of times

◉ c) To repeat a block of code as long as a condition is true   ✓

○ d) To execute a block of code exactly once

✓ Which section of a while loop gets evaluated in each iteration? *   1/1

○ a) The code inside the loop

◉ b) The loop condition   ✓

○ c) The code outside the loop

○ d) None of the above

✓ What is a common use case for a while loop in MATLAB? *   1/1

○ a) To generate random numbers

○ b) To create a function

◉ c) To repeatedly execute a block of code until a condition is met   ✓

○ d) To perform matrix multiplication

✓ In MATLAB, what is the purpose of a switch statement? *   1/1

○ a) To switch between different MATLAB versions

○ b) To switch the orientation of a plot

◉ c) To execute different code blocks based on the value of an expression   ✓

○ d) To turn the MATLAB session on or off

✓ Which of the following best describes the behavior of a switch statement *1/1
in MATLAB?

◉ a) It matches a value to a single specific case and executes its code block.   ✓

○ b) It matches a value to multiple cases and executes all corresponding code
blocks.

○ c) It only allows for the comparison of numeric data types.

○ d) It can only be used inside a for loop.

✓ How does a switch statement handle cases that don't match any of the provided options?   *1/1

○ a) It generates an error and stops execution.

● b) It executes the code block of the otherwise case.   ✓

○ c) It automatically adds a new case for unmatched values.

○ d) It ignores the unmatched values.

✓ In a while loop, what happens if the loop condition is initially false? *   1/1

○ a) The loop is executed once, and then it terminates.

● b) The loop never executes.   ✓

○ c) An error is generated.

○ d) MATLAB automatically changes the condition to true.

✓ What statement is typically used within a while loop to control the flow and exit the loop?   *1/1

● a) break   ✓

○ b) return

○ c) end

○ d) continue

✓ What is the primary advantage of using a switch statement over a series   *1/1
of if and else if statements in MATLAB?

○ a) The ability to handle multiple conditions simultaneously

○ b) Improved code readability and maintainability

◉ c) Enhanced performance and speed   ✓

○ d) Better memory utilization

✓ Which of the following data types can be used as expressions within a   *1/1
switch statement in MATLAB?

○ a) Only numeric data types

○ b) Only string data types

◉ c) Numeric, string, and cell data types   ✓

○ d) Numeric, string, and logical data types

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