

Multiple-choice questions:

1. What does memory allocation for a variable involve?

- A) Creating a space in memory for the variable's name and content
- B) Assigning a variable to another
- C) Updating the variable's value
- D) Tracking character stats in RPGs

2. What do variables hold in a program?

- A) Only integers
- B) Only strings
- C) Data such as integers, strings, or other data types
- D) Only memory addresses

3. What happens when one variable is assigned to another?

- A) A new box is created with the same contents
- B) They point to the same memory location
- C) The original variable is deleted
- D) The contents of the box are permanently changed

4. How are variables used in RPGs?

- A) To store static values
- B) To track character stats like attack, defense, and mana
- C) To create new game levels
- D) To manage user input

5. What does updating a variable involve?

- A) Changing the variable's name
- B) Replacing the contents of the box with a new value
- C) Creating a new variable
- D) Deleting the old variable

Open-ended questions:

1. Explain how memory allocation works for variables in a program.
2. What is the significance of referencing variables in programming?
3. Describe how variables can be dynamically updated in a program.
4. What types of data can variables store?
5. How does updating a variable work in programming?