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### \*\*Assignment: Variables, Data Types, Operators, and Conditions\*\*  
  
#### \*\*Questions\*\*  
  
1. \*\*Variable Assignment\*\*   
 Create a variable `X` and assign it the value 5. What data type does Python consider `X` to be?  
  
2. \*\*String Assignment\*\*   
 What will be the output when executing the following code snippet?  
 ```python  
 B = "Hello"   
 print(B)  
 ```  
  
3. \*\*Float Data Type\*\*   
 What type of value does the following variable store?  
 ```python  
 C = 3.14  
 ```  
  
4. \*\*Arithmetic Operations\*\*   
 What will be the output of the following code?  
 ```python  
 print(10 + 5)   
 print(10 - 5)   
 print(10 \* 2)   
 print(10 / 2)  
 ```  
  
5. \*\*Comparison Operators\*\*   
 Write code that checks if 7 is greater than 3. Print `True` if the condition is satisfied, otherwise print `False`.  
  
6. \*\*Equality Check\*\*   
 Modify the following code so that it prints `True`:  
 ```python  
 result = 10 - 5   
 print(result == \_\_\_\_) # Fill in the blank to make the expression true  
 ```  
  
7. \*\*Conditional Statement\*\*   
 What will be printed by this code snippet?  
 ```python  
 result = 9   
 if result > 5:   
 print("Greater")   
 else:   
 print("Lesser")  
 ```  
  
8. \*\*Logical Error Correction\*\*   
 Identify and correct the error in this code:  
 ```python  
 if 3 != 3:   
 print("False")   
 else:   
 print("Brain rot")  
 ```  
  
9. \*\*Creating Variables\*\*   
 Create three variables: `num1`, `num2`, and `result`. Assign `num1` the value 4, `num2` the value 6, and `result` as their sum. Print the result.  
  
10. \*\*Challenge: Multi-condition Check\*\*   
 Write a Python program that checks if a number stored in variable `num` is positive, negative, or zero. Use conditional statements to print the appropriate message.  
  
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### \*\*Instructions\*\*   
  
- Complete each question by writing the corresponding Python code.  
- Ensure that your code runs without errors.  
- Submit your code and outputs for review.