# Learning Python – Assessment Bank

Generated on: 2025-06-18 13:11:11

\*\*Learning Python: Variables and Datatypes - Remember (Bloom's Taxonomy)\*\*  
  
\*\*Short Answer Questions:\*\*  
  
1. What are the basic data types in Python? List at least three.  
  
2. Explain the difference between an integer and a floating-point number. Provide an example of each.  
  
3. What is a string in Python? How is it represented?  
  
4. What is a Boolean variable, and what values can it hold?  
  
5. How do you declare a variable in Python? Provide an example.  
  
6. What is the purpose of the `type()` function in Python?  
  
7. What happens if you try to perform an arithmetic operation on a string and an integer?  
  
8. What is the difference between a mutable and an immutable data type? Give an example of each.  
  
9. Explain the concept of variable assignment in Python. Use an example to illustrate.  
  
10. How do you convert a string representing a number into an integer? Give the function name and provide an example.  
  
  
\*\*Multiple Choice Question Options (Where Applicable):\*\*  
  
For questions like #7, a multiple-choice option could be added:  
  
7. What happens if you try to perform an arithmetic operation on a string and an integer?  
 a) It performs the operation treating the string as a number.  
 b) It automatically converts the string to a number.  
 c) It raises a `TypeError`.  
 d) It returns `None`. (Correct answer: c)  
  
  
For questions like #8, a multiple choice option could expand on the explanation:  
  
8. Which of the following are mutable data types in Python?  
 a) Strings  
 b) Integers  
 c) Lists  
 d) Tuples  
 e) Sets  
 (Correct answers: c,e)  
  
  
These MCQ options offer a more comprehensive assessment of basic understanding. Remember to adapt the difficulty and specificity to your specific course material.

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