Variables and Data Types

**Variable Declaration**

1. What is a variable?
2. List two rules that must be followed when declaring a variable.
3. Write three valid variable names that follow the programming convention outlined in the notes.
4. What is a descriptive variable?
5. Data types serve two purposes:
6. To inform the computer of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ of data a variable is storing
7. To inform the computer how much \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is needed for a particular variable
8. What is the name used to describe the eight basic data types.
9. List the 5 primitive types we will be using in this course.

**Assignment Operator**

1. Write a line of code that would assign a value of 100 to a variable named myGrade.
2. What is the purpose of the // operator?
3. What is the meaning of the term user-friendly?
4. Write a line of code that will initialize a variable named score to a value of 25.
5. The code below initializes the variable **price** by assigning it a value of 5.99. Write a line of code below it that displays the contents of the variable **price** on the terminal window.

double price = 5.99;

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1. Write a line of code that displays the message “Small Pizza = 5.99” where 5.99 is the value contained in the variable **price** from the previous question. (Use the **concatenation** operator)

**Data Types**

1. What are the two integer types we will be using in this course?
2. What is the largest number that can be stored in an int variable?
3. Numeric values which are not integers are stored as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ numbers.
4. How many bytes of memory does a variable of type double occupy?
5. Write a line of code that initializes a variable named pi to value of 3.14.
6. What is the difference between a character literal and a string literal?
7. A Boolean variable can contain a value of \_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_.