Chapter 2: Variables, Expressions, and Statements

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| **Main Points / Examples** | **Notes** |
| * When helpful names are used, variables and comments help keep the code organized and easier to debug * When evaluating statements, python follows the order of operations from left to right. * The three types of values are integer, float, and string. | * 3 types of values: integer (#), string (anything in “”s), and float (decimals)   + type() tells type of value * *Variables: name that refers to value (can assign / change)*   + Can’t start w/ # or contain special chars or reserved words   + Must start w/ letter or \_ * *Statement: unit of executable code (ie. print())* * *Operator: math operations (+, -, \*, /, \*\* (exponent))* * *Statement: combo of #s, variables, and operators (equations)* * Follow PEMDAS for statements   + \* and / on same level   + + and – on same level   + Read left to right * Modulus op. (%) returns remainder * *Concatenation: linking strings together (use +)* * **input**(*question*) function pauses for user input * Comments explain parts of program (start w/ #) * Lots of flexibility in choosing variable names   + Case-sensitive * Can convert values via **int()**, **float()**, and **str()**, functions |

**Summary**

When used properly, comments and useful variable names help keep program code organized, easy to understand, and easy to debug.