**Presentation Notes:**

1. What are the two main parts of a computer architecture?
   1. CPU
   2. RAM Memory
2. Google “basic Python commands” and list four commands.
   1. While Command
   2. Input Command
   3. Except Command
   4. Yield Command
3. Identify the two *syntax errors* in the following command: **Print("This command prints messages)**
   1. Capital “P”
   2. No end quotations
4. Summarize the cause and effect of a *syntax error*.
5. This occurs when the user makes a typo
6. The program will not run due to the syntax error
7. Explain what happens if you use a variable before it is defined.

The program will not run since the program has no definition of the variable.

1. Summarize the cause and effect of a *run-time* error.
2. This occurs when a variable has been undefined
3. The program will not run due to the run-time error
4. Write a Python statement to assign the value of 24 to the variable classSize.

Class size = 24

1. Create a valid Python variable name to store a student exam mark and that follows the “mixedCase” style guidelines.

examMarksOfStudentsInIcs1d0-B

1. Create a valid Python variable name to store a student exam mark and that DOES NOT follow the “mixedCase” style guidelines.

ExamMarksOfStudentsInIcs1d0-B

1. Write a mathematical expression that assigns a value of 62 to the variable myAnswer.
   1. myAnswer = 60+2

1. Write a mathematical expression that uses the variable aNumber and assigns a value of 77 to the variable myAnswer.
   1. aNumber = 7
   2. myAnswer = aNumber + 7
2. Change the program on the last slide of the presentation to calculate and print out the cube (power 3) of an input number.

**Student Questions:**

A resource for Python Style guidelines mal be found here:

[https://www.python.org/dev/peps/pep-0008/#naming-conventions](https://www.python.org/dev/peps/pep-0008/)

1. Identify which of the following are valid Python variable names (even if they do not follow the mixedCase style guidelines).

|  |  |
| --- | --- |
|  | True / False |
| StudentNumber | True |
| 5thRow | False |
| else | True |
| break | True |
| Row\_5 | True |

1. Identify which of the following are valid Python variable names that also follow the mixedCase style guidelines.

|  |  |
| --- | --- |
|  | True / False |
| StudentNumber | False |
| studentNumber | True |
| row | True |
| row5 | True |
| Row5 | False |

1. Summarize the difference between a *syntax error* and a *run-time* error.

A syntax error refers to a typo where a run-time error refers to an unknown variable.

1. Write an expression that calculates the cost of 6 slices of pizza at 2 dollars a slice assigns the result to a variable in RAM memory. Use proper style and meaningful names for your variables.

pizzaSlice = 6\*2

print ("That will cost$", pizzaSlice)

1. Write an expression that calculates the cost of a variable number slices of pizza at 2 dollars a slice assigns the result to a variable in RAM memory. Use proper style and meaningful names for your variables.

pizzaSlices = int (input ("How many pizza slices would you like? "))

totalCost = pizzaSlices \*2

print ("That will cost",totalCost)

1. Write a program that gets the number of slices from the console input, uses your expression in #5 above, and prints out the result to the console output. Use proper style and meaningful names for your variables and meaningful messages for your input and print commands.

pizzaSlices = int (input ("How many pizza slices would you like? "))

totalCost = pizzaSlices \*2

print ("That will cost",totalCost)

1. Extend your program in #6 above to also calculate and print out the number of boxes of pizza if each box contains 8 slices.

boxesOfPizza = int (input ("How many boxes of pizza would you like? "))

pizzaSlices = 2\*8

totalCost = pizzaSlices \* boxesOfPizza

print ("That will cost",totalCost)