**Presentation Notes:**

1. What are the two main parts of a computer architecture?
   1. CPU Processor
   2. RAM Memory
2. Google “basic Python commands” and list four commands.
   1. Print
   2. CMD
   3. Run
   4. If
3. Identify the two *syntax errors* in the following command: **Print("This command prints messages)**
   1. Capital P
   2. No end quotation mark
4. Summarize the cause and effect of a *syntax error*.

Any typos or missing symbols cause a syntax error. That causes your code to not work and a “syntax” error.

1. Explain what happens if you use a variable before it is defined.

If you use a variable before it is defined, you will get a Run-Time program answer

1. Summarize the cause and effect of a *run-time* error.

The cause of a run-time error is not defining a variable. The effect of that is syntax error.

1. Write a Python statement to assign the value of 24 to the variable classSize.

classSize = 24

print(“The answer is:”,classSize”

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

“examMark”

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

“ExamMark”

1. Write a mathematical expression that assigns a value of 62 to the variable myAnswer.
   1. **myAnswer = 2 + 10 \* 6**
   2. **print("The answer is:",myAnswer)**

1. Write a mathematical expression that uses the variable aNumber and assigns a value of 77 to the variable myAnswer.

aNumber = 7

myAnswer = aNumber + 10 \* 4

print("The answer is:",myAnswer)

1. Change the program on the last slide of the presentation to calculate and print out the cube (power 3) of an input number.
2. **value = int(input("insert number here:"))**
3. **value2 = value \*\* 3**
4. **print("The cubed of %d is %d" % (value,value2))**

**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 | false |
| break | false |
| 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 is when there is a typo or missing symbol. A run-time error is when the error is

Indescribable.

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.

slices = 6

cost = 2

total = slices \* cost

print("the cost of the 6 slices is:",total)

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.

slices = int(input("insert slices here:"))

cost = 2

total = slices \* cost

print("the cost of the 6 slices is:",total)

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.

slices = int(input("insert slices here:"))

cost = 2

total = slices \* cost

print("the cost of the 6 slices is:",total)

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.

slices = int(input("insert boxes here:"))

boxes = 8

cost = 2

total = slices \* cost

print("the cost of the 6 slices is:",total)