**Presentation Notes:**

1. What are the two main parts of a computer architecture?
   1. **Ram memory**
   2. **Cpu processor**
2. Google “basic Python commands” and list four commands.
   1. **def**
   2. **del**
   3. **elif**
   4. **else**
3. Identify the two *syntax errors* in the following command: **Print("This command prints messages)**
   1. **quotations**
   2. **brackets**
4. Summarize the cause and effect of a *syntax error*.

**The things that prevent from running a command on the python console are syntax errors which missing quotations, brackets, and many other syntax errors.**

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

**If the variable is used before defining it will result in a run time program. Note that Variables must be defined before they are used in the python console.**

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

**A runtime error is a program mistake that happens while the program is running. Another sort of runtime error is a memory leak . This kind of mistake makes a program constantly go through more RAM while the program is running.**

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

class\_size = (24)

print(class\_size)

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

Exam\_N3mber = (78)

print(Exam\_N3mber)

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

exam\_mark = (78)

print(exam\_mark)

1. Write a mathematical expression that assigns a value of 62 to the variable myAnswer.

myAnswer = (31\*2)

print(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\*2

print(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.

**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 | False |

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

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

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

Syntax error occurs when we type something opposite from the rule of python’s coding, and a run time error occurs when the execution of the program.

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\_of\_each = 2

print(slices\*cost\_of\_each)

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 = 6

cost\_of\_each­\_slice = 2

print(slices\*cost\_of\_each\_slice)

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.

slice = int(input("enter 4 digit number:"))

price = int(input("Enter a Price:"))

cost = slice \* price

print("cost of slice", cost)

print("The cost of slice is $", + cost)

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.

box = int(input('Enter the number of boxes')

slices = 8

box= (slices\*box)

Total\_cost = box \* 5

print("The cost of box is $", + Total\_cost)