AP CSP
Aim:

Do Now:SWBAT analyze how functions are called in Python by comparing it to Snap coding.

Q-5: Consider the code block below. What prints?

```
def add_two(num):
    num = num + 2
    print(num)

def add_three(nums):
    nums = nums + 3
    print(nums)

hi = 4
add_two(hi)
add_three(hi)
```

- A. 67 (on the same line)
- B. 67 (on two separate lines)
- C. 69 (on two separate lines)
- D. 69 (on the same line)

Turn and Talk: With your partner, determine the proper order of the blocks.

Construct a block of code with four functions, defined in this order: printName, printGPA, printAttendance, printStudentInfo. printStudentInfo should call the other three functions which will print all of the student's information. Be mindful of indentation!

```
def printName(name):
def printStudentInfo(stuName, stuGPA, stuDaysAbsent):
printStudentInfo("John", 3.6, 2)
printStudentInfo("Ben", 3.2, 4)
printName(stuName)
printGPA(stuGPA)
printAttendance(stuDaysAbsent)
def printGPA(gpa):
print("Days absent: " + daysAbsent)
def printAttendance(daysAbsent):
print("GPA: " + gpa)
print("Name: " + name)
```

Check your solution here (scroll to the bottom of the page)

1) What are the functions in this code?
2) What are the parameters?
3) What are the arguments?

Live Coding Session

How do we create a function that passes in two integers and determines the sum?

```
def sum(num1, num2):
    sum = int(num1) + int(num2)
    print(num1, " + ", num2, " = ", sum)

sum(3,4)
```

Activity

Create a program that passes in two integers through three functions that perform some one of the following math operations.

Operator	Description	Example
+ Addition	Adds values on either side of the operator.	a + b = 30
- Subtraction	Subtracts right hand operand from left hand operand.	a – b = -10
* Multiplication	Multiplies values on either side of the operator	a * b = 200
/ Division	Divides left hand operand by right hand operand	b / a = 2
% Modulus	Divides left hand operand by right hand operand and returns remainder	b % a = 0
** Exponent	Performs exponential (power) calculation on operators	a**b =10 to the power 20
//	Floor Division - The division of operands where the result is the quotient in which the digits after the decimal point are removed. But if one of the operands is negative, the result is floored, i.e., rounded away from zero (towards negative infinity) –	9//2 = 4 and 9.0//2.0 = 4.0, -11//3 = -4, -11.0//3 = -4.0