**Define:**

Procedural Programming- Tells the computer what do do step by step. Like following a recipe from top to bottom.

Object Oriented Programming- Instead of step by step, programs are carried out by objects. Objects are made from classes. In the place of procedures, object methods carry out instructions.

Describe the purpose of **main()** – It is the function a C++ program always looks for. It calls all our functions and interacts with our objects.

“programmer created” class- A class created by the programmer

instance variables / class variables- Both are member variables in that they are part of a class. The difference is that an object creates a copy of an instance variable every time a new one is created. Class variables are class wide. There is always only one of them, no matter how many objects are created.

Why are “programmer created classes” important in programming?

Types of objects have we used so far- pointers, strings, int, double, etc.

Difference between a method and function- A method is a function that belongs to a class (or an object)

*dot.operator-* allows access to a part of an object.

Examples of dot.operator we have used in previous programs- cin.get

set method- assigns a value to an attribute of an object

get method- returns a value to an attribute of an object

**LAB ASSIGNMENT**

**Interest Rate + Principal Calculator**

**Create a program that will that will calculate Yearly Interest or Compound Interest on a starting principal.**

**Accept user input in dollars$ in main(). Program should not run if dollar amount > 0. Prompt user and exit the program.)**

**Break program into TRUE OOP design. Use class with, setter, and getter methods to solve the problem.**

1 argument will represent **savings**

1 argument will represent **years.**

1 argument will represent **interest rate.**

**Sample:**

Please enter $ in savings.

3334

Please enter number of years

3

Please enter interest rate

1.0

Year 1 = $3367.34

Year 2 = $3401.01

Year 3 = $3435.02



