

*Note: use system.out.print for tester labs

*There can be pre-labs in command window that test and get used to the new concepts

Lab 1- rectangle moves across screen

- Introduce objects and variables
- Draw rectangles and other shapes
- Draw vs fill method
- Explain the parameters
- paintComponent and repaint
- Mouse click
- Counters and ints

**Lab 2- typing game

- Strings
- Key events/user input
- Equals method
- Start with entering name
- Substring
- Make new methods (drawString with lines)
- If statements
- Count mistakes
- Get the time of the system
- Sum variables, +=

Lab 3- graphic calculator

- Text fields and buttons
- Int math and double math
- Math programs, +, -, *, /
- Square root
- CVMath and static classes
- Power method

Lab 4 - drag rectangle/custom object across screen

- mouse drag, mouse press, mouse release
- Contains method
- More if statements and booleans
- Make own classes and methods
- toString
- Make game at end like Laundry

**Lab 5- car crash game

- Java threads and runnable
- Make own car class
- Intersects method
- More mouse input
- Arrays of rectangles
- Math.random()
- While loop
- For loop to fill array
- Interface
- Inheritance

Lab 6 - alphabetize list

- Compare to method
- Read from file with easyreader
- Use counter to get number of words
- Make arrays
- Introduce arraylist to add names
- Sorting - bubble, insert, selection...

Need

- Passing parameters
- overload methods