Using IDLE
IDLE Functionality

• Very convenient for typing simple expressions and code directly into the “shell” window
• This is convenient for trying things out, or to use as a calculator, but not good for writing entire programs
• Create new programs, open existing ones
• Run programs by hitting F5
Set your preferences

• The font you use can help or hinder your programming
• It’s important to distinguish 0 from O, 1 from I and l and | and !, () from [], and {} – Here are these same characters in Courier New:

  0 O 1 I I | ! ( ) [ ] { }

• Also, it’s helpful if punctuation marks are emphasized, especially . , : ;

• In programming, a tab is an actual character, representing some undefined but settable number of spaces – By default, when you hit the tab key, IDLE puts in four spaces, not an actual tab – If you use any other editor for your programs, be sure to do the same!
Stopping a runaway program

• A program error can sometimes lead to an infinite loop, that is, code that can never stop

  while True:
    print(“Hello world”)

• This loop keeps executing because the condition is always true

• To stop a runaway program, go to Shell > Restart Shell or enter control-F6

• You can also press control-C (to kill the current process)
The IDLE Debugger

- Very convenient if you’d like to figure out why your program is crashing/isn’t doing what you want it to do

- You can pause the program before certain lines are executed and inspect the program’s state

- The debugger allows you to step through your program, one statement at a time, to see what it is doing
Running the debugger

• Go to Debug -> Debugger

• Add a breakpoint to a specific line
  – Right click -> set breakpoint
  – Debugger stops before that line is executed
  – Can add new breakpoints for more refined debugging