To make a program:

* Open terminal
* Type - idle
  + Enter
* Opens idle
* Save as filename.py
* Open .py file in SublimeText

Edit file in SublimeText

* Type - print (“something”)
  + Writes something
* Type:
  + X = 10
  + Print(type(x))
  + It will tell you x is an integer
* Type:
  + X = 0.1
  + Print(type(x))
  + It will tell you x is a float (a decimal)
* Type:
  + from fractions import Fraction
  + x = Fraction(16, -10)
  + print(x)
  + print(type(x))
  + Doesn’t work in version 2 of python
* Type:
  + X = “string”
  + Print (type(x))
  + It will tell you x is a string
* Type:
  + Y = “also a string”
  + Print (type(x))
  + It will tell you y is a string
* Type:
  + Z = “m”
  + Print(type(z))
  + It will tell you z is a string
* Type:
  + My\_string = “The little brown fox”
  + Print(my\_string[0])
    - 0 – first letter
    - : - to the end
    - 1 – second letter
    - 2 – third letter
    - etc
    - types part of the string that is told in []
  + print(my\_string).upper()
    - Prints it in capitals
  + Print(my\_string).title()
    - Prints it with a capital at the start of each word
  + Print(my\_string)[::-1])
    - Prints it backwards
* Type:
  + Shopping = [“bread”, 1, 2, 3, “butter”]
  + Print(type(shopping))
  + It will tell you shopping is a list
* Type:
  + Shopping = [“bread”, “butter”, “ham”]
  + Print(type(shopping))
  + It will tell you shopping is a list
* Type:
  + Shopping = [“bread”, “butter”, “ham”]
  + Print(“ham” in shopping)
  + Will tell you if ham is in shopping or not – true/false
* Type:
  + Shopping = [“bread”, “butter”, “ham”]
  + Print(shopping[1])
  + Will print the second item in the list – butter
* Type:
  + Shopping = [“bread”, “butter”, “ham”]
  + Shopping[0] = “milk”
  + Print(shopping)
  + Will add milk to the beginning of the list
* Type:
  + Shopping = [“bread”, “butter”, “ham”]
  + Shopping.append(“milk”)
  + Print(shopping)
  + Will add milk to the list
* Type:
  + Shopping = [“bread”, “butter”, “ham”]
  + Shopping.pop(1)
  + Print(shopping)
  + Will remove second item in list
* Type:
  + Student = (“Ian”, 20, “Maths”)
  + Print(type(student))
  + Will tell you it is a tuple – a data structure – elements in this list cannot be changed
* Type:
  + S = {1, 2, 2, 3, 3}
  + Print(s)
  + Will tell you it is a set
* Type:
  + Shopping = [“bread”, “ham”, “cheese”, “bread”]
  + Print(set(shopping)) or print(list(set(shopping)))
  + Will tell you the list but remove any duplicates (bread)
* Type:
  + Country\_codes = {“US”: “United States”, “UK”: “United Kingdom”}
  + Print(type(country\_codes))
  + Will tell you it is a dictionary
* Type:
  + Country\_codes = {“US”: “United States”, “UK”: “United Kingdom”}
  + Print(country\_codes.get(“US”))
  + Tells you US means United States
* Type:
  + Country\_codes = {“US”: “United States”, “UK”: “United Kingdom”}
  + Country\_codes[‘Fr’] = ‘FRANCE’
  + Print(country\_codes)
  + Prints all country codes in a list
* Python numeric operations:
  + + plus
  + – minus
  + / divide
  + \* multiply
  + % remainder
  + < less-than
  + > greater-than
  + <= less-than-equal
  + >= greater-than-equal

Run file in Terminal:

* Type - ls
  + Enter
  + Shows file directory
* Type - cd Filelocation/
  + Enter
  + Opens file location
  + If the file name is 2 words then click ‘tab’ after first word
* Keep going to get to location of .py file
* Type - python test.py
  + Enter
  + Runs file
* Type – cd
  + Enter
  + Returns you to the start of directories
* Type – cat filename.py
  + Shows code within file
* If it ever gets stuck out of coding press – Ctrl + D
* Press up arrow – repeats previous command