

CNRI HW 3

Fall 2023

1 CNRI Week 3 Homework

1. Review `lecture_3.ipynb` and `Python_Lecture_3_Notes.pdf` as needed
2. With your project partner, write up a formal project proposal, due by Week 4 programming (Thursday). See the `project_template.pdf` and `project_example.pdf` under `box/fall-2023/python_projects`
3. Practice functions with the following:
 - Create a function in a Python document (editor of your choice) called `z` that has two inputs, `x` and `y`. Have it return the value $x^3 + 2y^2 - 4x + 2$. Test it with several candidate values of `x` and `y` (e.g., 0 and 0, 0 and 1, 1 and 0, etc.) Do the results make sense?
 - Modify the function above so that it checks whether or not `x` and `y` are integers or floats, not strings, booleans, or other variables. How would you use `if` statements, `isinstance`, and `and/or` operators to check this?
 - If the above are met (either of the numbers are not digits or floats), return an error message instead of the value. Test to make sure this is working.
4. Email raphael.geddert@duke.edu and miles.martinez@duke.edu a screenshot of step 3, or send it over the CNRI-Interns slack channel in a private message.