

Homework 7

1. Try to rewrite some of your previous code in more Pythonic way using list comprehensions/generators.

2. Use functional programming to uppercase all strings in a list:

Sample list: ["Hi", "ball"]

Sample output: ["HI", "BALL"]

3. Write a Python program which multiplies two numbers without using the * operator.

Sample input for first number: 3

Sample input for second number: 6

Sample output: 18

Advanced: Write it in a functional way using lambda and reduce.

4. Write a Python program which sums the digits of an integer taken from user input until the result is a single digit integer.

Sample input: 438

Step 1: $4+3+8 = 15$

Step 2: $1+5 = 6$

Sample output: 6

Advanced: Write it in a functional way.

5. Write a Python program which exports *people_full.csv* file to a SQLite database. You can use pandas and sqlalchemy just as we did in the lecture. You may get a warning about mixed types in some columns but don't fret about it.

6. You have sample data of movies released by a big Hollywood studio. Choose a suitable for the job Matplotlib chart and plot it:

Adventure	941
Action	854
Drama	4595
Comedy	2125
Thriller	943
Horror	509
Romantic Comedy	548
Musical	149
Documentary	1952
Western	161
Concert	64
Multiple Genres	35
Reality	5

