

Extra Credit 3

Due: November 10, 2022

Points: 30

In the *make_change.py* program, change the output to reflect the following:

1. If there is exactly 1 quarter, dime, nickel, or penny, your output uses the singular for the coin
2. If there is more than 1 quarter, dime, nickel, or penny, your output uses the plural for the coin
3. If there are no quarters, dimes, nickels, or pennies, do not print that coin
4. If a non-positive integer, or a non-integer, is entered, give the error message “bad input; must be a positive integer” and quit
5. If there are two different types of coins, put an “and” between them
6. If there are three or more types of coins, put a comma after each type of coin except the last, and put an “and” between the last two types of coins.

To turn in: Please turn in the program in the file *new_make_change.py*.

Examples:

Amount of change: 92
92 cents is 3 quarters, 1 dime, 1 nickel, and 2 pennies

Amount of change: 16
16 cents is 1 dime, 1 nickel, and 1 penny

Amount of change: 15
15 cents is 1 dime and 1 nickel

Amount of change: 30
30 cents is 1 quarter and 1 nickel

Amount of change: 34
34 cents is 1 quarter, 1 nickel, and 4 pennies

Amount of change: 1
1 cent is 1 penny

Call your program “bigchange.py”.