1. Simple Calculator

function simple_calculator:
    number1 = get input from user
    number2 = get input from user
    operator = get input from user
    while number1 and/or number2 are not numeric:
        inform user about error and ask again for a valid number
        if number1 and number2 are valid:
            break out of loop
    while operator is not valid:
        inform user about error and ask again for a valid number
        if operator is valid:
            break out of loop
    if number2 = 0 and operator = /:
        inform user about invalid operation and end program
    solution = int(number1) operator int(number2)
    print solution

2. Grading system

function generate_grade(score):
    if score smaller than 60:
        grade = F
    elif score smaller than 70:
        grade = D
    elif score smaller than 80:
        grade = C
    elif score smaller than 90:
        grade = B
    else:
        grade = A
    return „Your grade is: {grade}“

3. Find max of three numbers

function find_max(number1, number2, number3):
    set current_max to number1
    if number2 is bigger than current_max:
        set current_max to number2
    if number3 is bigger than current_max:
        set current_max to number3
    print current_max

Alternative:

numbers = list of three numbers
function find_max(*numbers*):
    set current_max to first element of list *numbers*
    for each num in *numbers*:
        if num is bigger than current_max:
            set current_max to num
    print current_max

4. Countdown timer

function countdown(number):
    if number smaller or equal to 0:
        inform user about invalid number and end program
    while number bigger than or equal to 0:
        print number
        decrement number by 1
        end program if number is smaller than 0

5. Sum of even numbers

function sum_evens(number):
    set output to 0
    for num in range(0, number):
        if num is even:
            add num to output
    return output