1) Take a look at the following Function.

   a) What makes this a recursive function?

       ```python
       def m(n):
           if n < 0:
               m(-n)
           elif n < 10:
               print(n)
           else:
               m(n/10)
               digit = n // 10
               print (",", digit % 3)
       ```

   b) What is the base case?

   c) What is the recursive case?

   d) With a partner trace through the code if m is called with 743. What does the code print?
2) Write a function that sums up all the integers in a list such as:

```python
def sum_list(my_list):
    total = 0
    for item in my_list:
        if isinstance(item, int):
            total += item
        elif isinstance(item, list):
            total += sum_list(item)
    return total
```

```python
my_list = [3, 4, [1, 3], 2, [2, [1, 2, 1], 4]]
goal = sum_list(my_list)
print(goal)  # Output: 23
```

without using recursion.

3) Write the improved function: