TASK 9. Finding bad beads:

write a python code that does the following:

make a dictionary call total with key:value

make another dictionary call error with key:value

both of these dictionary should be empty

first read the data from delta_testing_653

then column index 0 is the CAS

for each ‘value’ in that CAS, go into folder Working->folder of ‘value’->read ‘value.text’->starting from row index 6 of that text file->split the line by spaces(the row is formatted as “info info info….’->we will save the second info(index 1) as the key and 1 as the value to total, we will add 1 to the value if the key is already present->we will keep going and only stop when we meet a line with all space(I left an empty line after all the beads are listed)->now we should have a dictionary called total with key:value pairs of total appearance

now we will worry about the column index 1 and 2 in delta_testing_653

for each row, find the difference between column index 1 and 2, if it is more than 2->find the CAS of that row (column index 0)->repeat the steps above->save it into error instead

After this step, we should have a dictionary called error with key:value pairs of total appearance of the beads that may causes the error to be more than 2

now we will create a csv file

for each key in the total dictionary, find the value of the key, then find the value for the same key in the error dictionary, if not found in the error dictionary default as 0, then we will divide the value in the error/total and we will write to this csv file as columns: bead, error,total, %error.

After we run all of the beads in the total dictionary, sort everything by error% and save the csv file as bad_bead.csv