def read\_file(filename):

file = open(filename, 'r')

data = file.read().strip().split('\n')

file.close()

return data

def cal\_check\_digit(number, total):

if len(number) > 1:

digit = int(number[0])

total += (digit \* (len(number)+1))

new\_number = number[1:]

check\_digit = cal\_check\_digit(new\_number, total)

else:

digit = int(number[0])

total += (digit \* (len(number)+1))

calc\_modulus = total % 11

check\_value = 11 - calc\_modulus

if check\_value == 11:

return '0'

else:

if check\_value == 10:

return 'X'

else:

return str(check\_value)

if len(number) == 9:

return number + check\_digit

else:

return check\_digit

isbns = read\_file('ISBNPRE.TXT')

for i in range(len(isbns)):

print(cal\_check\_digit(isbns[i], 0))