

```

import pandas as pd
import xlwings as xw
import random
import numpy as np
import time

start_time = time.time()

target = 10000
beta = 1.0/target

Y = np.random.exponential(1000)

"""
Open Template (window will stay open during calculation)
"""

wb = xw.Book('MonteCarlo.xlsx')

sht = wb.sheets("Input and results")
# Get input page open

N=50 #number of simulations
ListOfLists =[]

for i in range(N): ListOfLists.append([i]) #create list of lists

for item in ListOfLists:
    N = random.randint(0,10000)
    sht.range('E14').value = N #test fo N being randomly selected from (
    results = sht.range('G19:G25').value
    item.extend(results)
    item.append(N)

df = pd.DataFrame(ListOfLists)

# print results to csv
df.to_csv('results3.csv',index=False, header=["num","N", "Probability o

print("--- %s seconds ---" % (time.time() - start_time))

```