**6. Tracert**

import os  
import datetime  
import time  
  
now = datetime.datetime.now()  
timer = now.strftime('%H\_%M\_%S')  
  
path = 'C://Users//kamil//Desktop//' + timer + 'tmp.txt'  
command = 'tracert 8.8.8.8 >> ' + path  
print(os.getcwd())  
os.chdir('C://Users//kamil//Desktop')  
print(os.getcwd())  
  
#os.system('cmd /c "tracert 8.8.8.8 > C:/Users/kamusial/Desktop/new.txt"')  
#os.system(f'cmd /c {command}')  
  
ts1 = time.time() #timestamp ts1  
os.system(f'cmd /c "tracert 8.8.8.8 >> {path}"')  
ts2 = time.time() #timestamp ts1  
  
print(f'Tracert command took {round(ts2-ts1)} seconds')  
  
with open(path, 'r') as tracert: #odczytanie pliku  
 content = tracert.readlines()  
#print(content)  
  
#odczytanie ilości hopków oraz czasu  
star\_counter = 0  
for i in range (len(content)):  
 content[i] = content[i].split()  
 if len(content[i]) > 1 and content[i][1] == '\*':  
 star\_counter += 1  
print(content)  
no\_of\_hops = int(content[-3][0]) - star\_counter  
  
time\_to\_get = 0  
for i in range (4, (len(content)-2)):  
 content[i][1] = content[i][1].replace(' ', '')  
 content[i][1] = content[i][1].replace('ms', '0')  
 content[i][1] = content[i][1].replace('\*', '0')  
 time\_to\_get += int(content[i][1])  
print()  
print(f'Hoop number to 8.8.8.8 is {no\_of\_hops} and total time is {time\_to\_get} ms ')