```python
#IMPORT MODULES
import numpy as np
import pandas as pd
import math as mth

#READING LIBRARY SPECTRAL DATA
def read_library(path_lib_data):
 library_data = np.array(pd.read_csv(path_lib_data))
 return library_data

#READING UNKNOWN SPECTRAL DATA
def read_unknown(path_unk_data):
 unknown_data = np.array(pd.read_csv(path_unk_data))
 return unknown_data

#HQI OUTPUT DATA
def write_hqi_output(hqi_data, path_hqi):
 hqi_output_writer = path_hqi
 pd.DataFrame(hqi_data).to_csv(hqi_output_writer, index=False)

#CORREL OUTPUT DATA
def write_correl_output(correl_data, path_correl):
 correl_output_writer = path_correl
 pd.DataFrame(correl_data).to_csv(correl_output_writer, index=False)

#CALCULATE HQI FOR SPECTRA
def HQI(library, unknown):
 hqi_indexes = []
 for r in library:
 for u in unknown:
 hqi = round((mth.pow(np.dot(r,u),2))/(np.dot(r,r)*np.dot(u,u)),2)
 hqi_indexes.append(hqi)
 #print(hqi_indexes)
 hqi_indexes = np.array(hqi_indexes)
 library_count = len(library)
 unknown_count = len(unknown)
 hqi_indexes = np.reshape(hqi_indexes, (library_count,unknown_count)).T
 return hqi_indexes

#CALCULATE R2 FOR SPECTRA
def Correl(library, unknown):
 correl_indexes = []
 for r in library:
 for u in unknown:
 correl = np.corrcoef(r,u)[0,1]
 correl_indexes.append(correl)
 #print(correl_indexes)
 correl_indexes = np.array(correl_indexes)
 library_count = len(library)
 unknown_count = len(unknown)
 correl_indexes = np.reshape(correl_indexes, (library_count,unknown_count)).
T
 return correl_indexes

#MODIFY IF NEEDED
path_lib_data = r'C:\Users\edwincaballero\Desktop\HQI Program\library_data.csv'
path_unk_data = r'C:\Users\edwincaballero\Desktop\HQI Program\unknown_data.csv'
library = read_library(path_lib_data)
unknown = read_unknown(path_unk_data)
hqi_data = HQI(library, unknown)
correl_data = Correl(library, unknown)

path_hqi = r'C:\Users\edwincaballero\Desktop\HQI Program\hqi_results.csv'
write_hqi_output(hqi_data, path_hqi)
path_correl = r'C:\Users\edwincaballero\Desktop\HQI Program\correl_results.csv'
write_correl_output(correl_data, path_correl)

print()
print('SUCCESS')
print(str(len(library))+ ' library spectra are compared to ' +str(len(unknown))
+ ' unknown spectra')
print()
print(str(len(hqi_data)) + ' HQI, ED, correl values in total calculated')
```