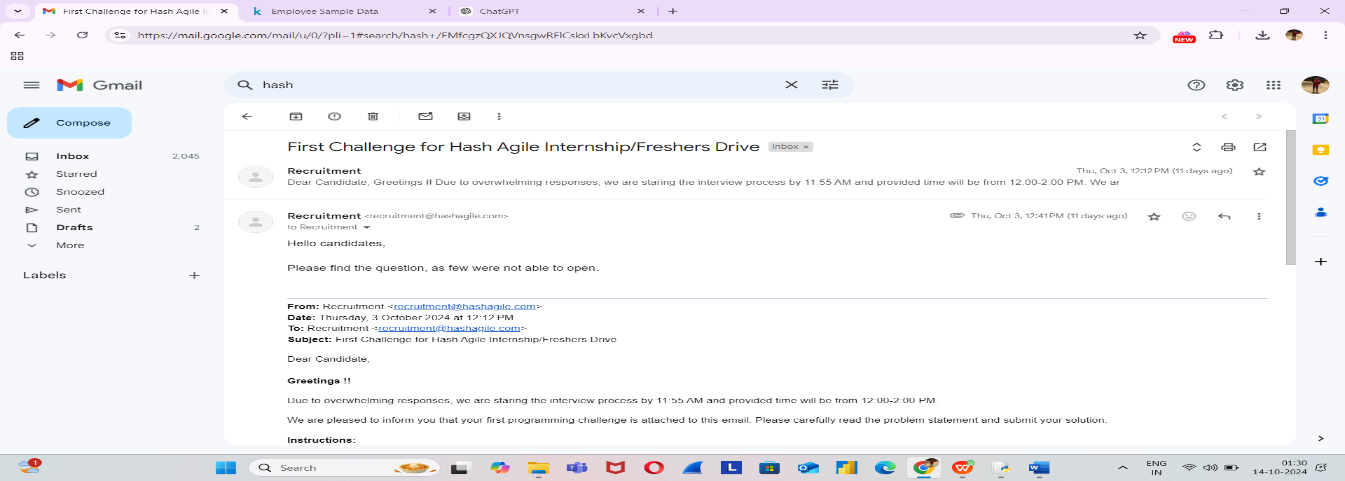
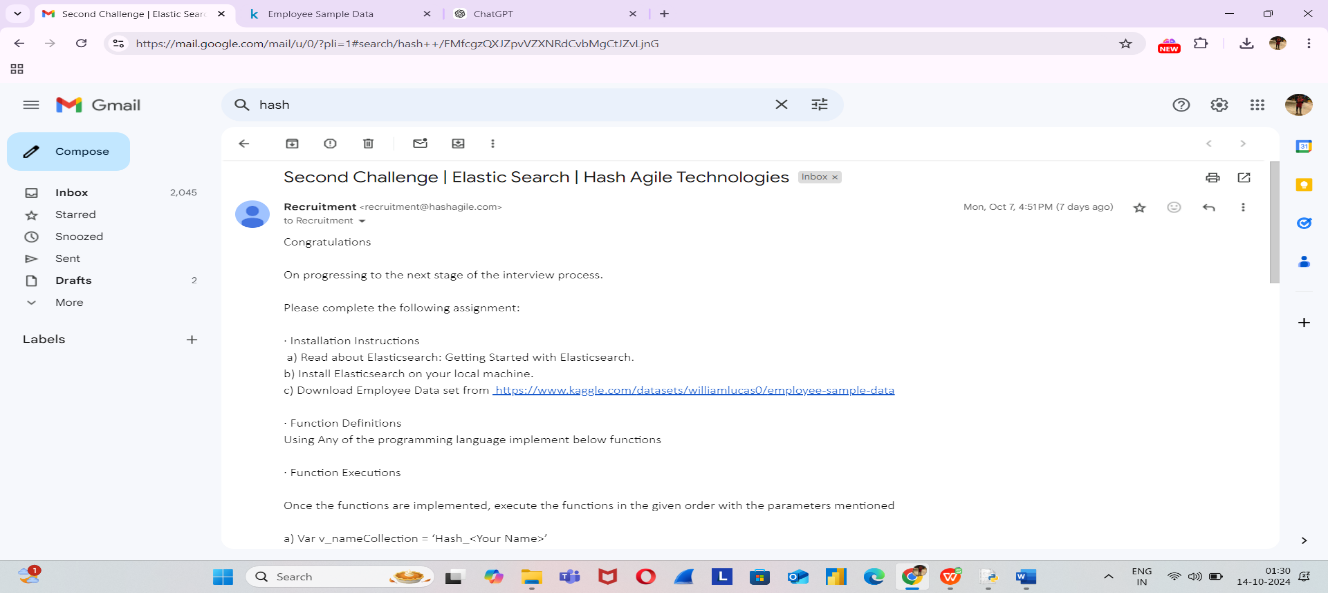


**SK KHAJA MAINUDDIN**



Github Link for Round1: <https://github.com/CISNKPJUKFJV/Round-1.git> Github Link for Round2: https://github.com/CISNKPJUKFJV/Round-2.git

Code:

import pandas as pd

employee\_df = pd.read\_csv(r"C:\Users\mainu\Downloads\archive (7)\Employee Sample Data 1.csv", encoding='ISO-8859-1')

collections = {}

def createCollection(name):

collections[name] = employee\_df.copy()

def getEmpCount(collection\_name):

return len(collections[collection\_name])

def indexData(collection\_name, column\_name):

if column\_name in collections[collection\_name].columns:

collections[collection\_name].set\_index(column\_name, inplace=True)

else:

print(f"Column '{column\_name}' not found in collection '{collection\_name}'.")

def delEmpById(collection\_name, emp\_id):

collections[collection\_name].drop(collections[collection\_name][collections[collection\_name]['Employee ID'] == emp\_id].index, inplace=True)

def searchByColumn(collection\_name, column\_name, value):

if column\_name in collections[collection\_name].columns:

return collections[collection\_name][collections[collection\_name][column\_name] == value]

else:

print(f"Column '{column\_name}' not found in collection '{collection\_name}'.")

return pd.DataFrame()

def getDepFacet(collection\_name):

if 'Department' in collections[collection\_name].columns:

return collections[collection\_name]['Department'].value\_counts()

else:

print(f"Column 'Department' not found in collection '{collection\_name}'.")

return pd.Series()

v\_nameCollection = 'Hash\_JohnDoe'

v\_phoneCollection = 'Hash\_1234'

createCollection(v\_nameCollection)

createCollection(v\_phoneCollection)

print("Employee count in v\_nameCollection:", getEmpCount(v\_nameCollection))

indexData(v\_nameCollection, 'Department')

indexData(v\_phoneCollection, 'Gender')

print("Employee count after indexing:", getEmpCount(v\_nameCollection))

delEmpById(v\_nameCollection, 'E02003')

print("Employee count after deletion:", getEmpCount(v\_nameCollection))

print("Search by Department (IT) in v\_nameCollection:\n", searchByColumn(v\_nameCollection, 'Department', 'IT'))

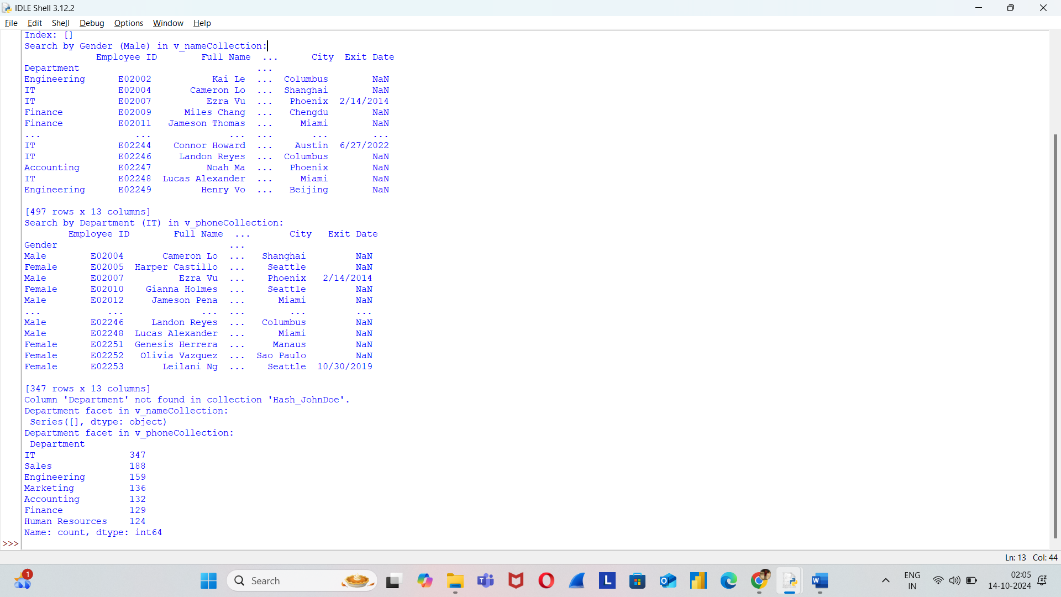
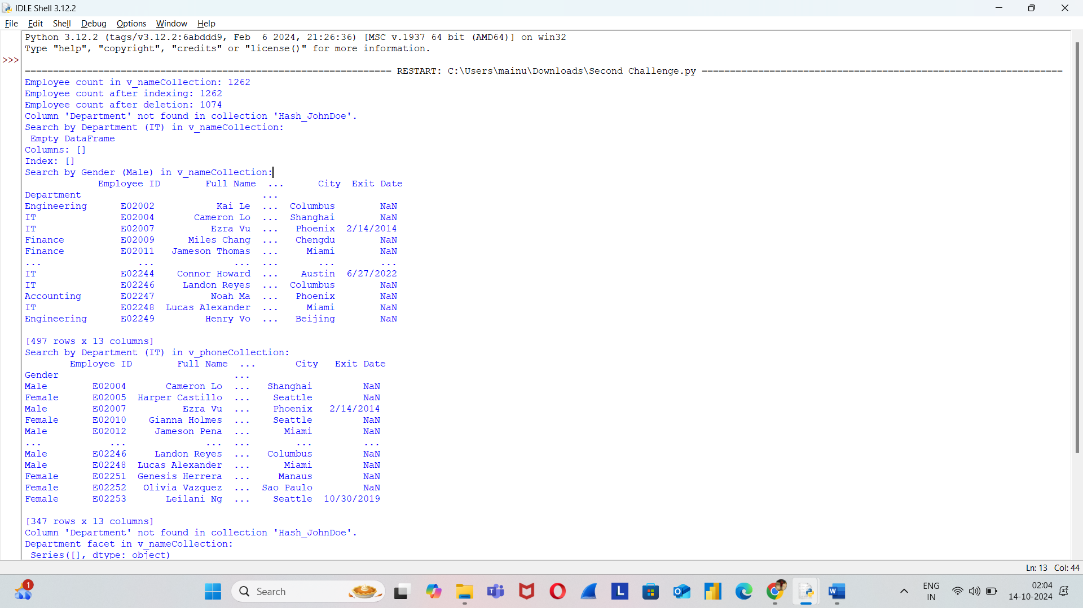
print("Search by Gender (Male) in v\_nameCollection:\n", searchByColumn(v\_nameCollection, 'Gender', 'Male'))

print("Search by Department (IT) in v\_phoneCollection:\n", searchByColumn(v\_phoneCollection, 'Department', 'IT'))

print("Department facet in v\_nameCollection:\n", getDepFacet(v\_nameCollection))

print("Department facet in v\_phoneCollection:\n", getDepFacet(v\_phoneCollection))

**Output**

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