**GENERATING DIFFERENT QUESTION PAPERS FROM THE INFORMATION IN THE EXCEL FILE**

Structure:

Read the contents of the excel sheet into csv file and took the data from the csv file. Using panda module, we obtained the data needed for forming questions. Using the random module, we obtain allocate random questions to each question paper and shuffle the options to get a unique answer key.

Assumptions:

* The file is stored in the path used, hence works only on this particular system.
* User can only view only one question paper and its answer key at a time
* There is no memory constraint
* Each question paper may have one or two common questions.
* All the questions are of the same type.
* The first column “Number” has been deleted from the original file provided, and then the operations are performed.
* The file from which the information is extracted is a CSV file of the original(edited) excel file.

import sys

import pandas as pd

import random

df=pd.read\_csv('Questionpapers.csv',usecols=['Name','Symbol'])

#creating separate lists for name ans symbol

name=df['Name'].tolist()

symbol=df['Symbol'].tolist()

#creating a dictionary where question is the key and answer is its value

ori\_dict={name[i]:[symbol[i]] for i in range(len(name))}

final\_dict={}

#creating a choices dictionary and editing it to create questions and their choices

for i in name:

    for j in symbol:

        choices=random.sample(symbol,2)

        break

    final\_dict[i]=choices

#print final\_dict

result={key: value + final\_dict[key] for key,value in ori\_dict.items()}

#print(result)

#code to replace duplicate choices of a question

for i,j in result.items():

    if (j[0]==j[1])|(j[0]==j[2]):

        j[0]=random.choice( [x for x in symbol if (x!=j[1])&(x!=j[2])])

        #print(j)

for i in result.values():

    random.shuffle(i)

    #print(i)

#printing question paper

print("You can only print one question paper set at a time")

while(1):

    print("\nEnter 1 to view a question paper: ")

    ch=int(input())

    print("\n")

    if ch==1:

        temp\_n=random.sample(result.keys(),20)

        #print(temp\_n)

        temp\_s=[result[k] for k in temp\_n]

        #print(temp\_s)

        for i in range(20):

            print(str(i+1)+". What is the symbol of "+temp\_n[i]+"?")

            print("A."+temp\_s[i][0]+" B."+temp\_s[i][1]+" C."+temp\_s[i][2]+"\n")

        print("Answer key for the above question paper:\n")

        for i in temp\_n:

            x=temp\_n.index(i)+1

            if (ori\_dict[i][0]==result[i][0]):

                print(str(x)+".A")

            elif (ori\_dict[i][0]==result[i][1]):

                print(str(x)+".B")

            elif (ori\_dict[i][0]==result[i][2]):

                print(str(x)+".C")

            else:

                print(str(x)+".None")

    else:

        print("Try Again!")

        sys.exit(1)