class Main:

def \_\_init\_\_(self):

# The file\_handler object will be used to read and write to files.

self.file\_handler = File()

login\_menu\_is\_running = True

while login\_menu\_is\_running:

print('1 - Sign up')

print('2 - Login')

menu\_choice = input('\nEnter menu option: ')

login\_menu\_is\_running = False

if menu\_choice == '1':

self.signup()

elif menu\_choice == '2':

self.login()

else:

print('Please choose a number from the menu.')

login\_menu\_is\_running = True

menu\_is\_running = True

while menu\_is\_running:

print('\n1 - Add a new student to the system.')

print('2 - Display a student\'s details.')

print('3 - Edit a students details.')

print('4 - Log out.')

menu\_choice = input('\nEnter menu option: ')

if menu\_choice == '1':

self.add\_student()

elif menu\_choice == '2':

self.print\_student\_details()

elif menu\_choice == '3':

self.edit\_student\_details()

elif menu\_choice == '4':

menu\_is\_running = False

else:

print('Please choose a number from the menu.')

def signup(self):

username = input('Enter username: ')

password = input('Enter password: ')

if len(password) < 8:

print('Password should contain at lease 8 characters.')

self.signup()

else:

self.file\_handler.add\_account(username, password)

def login(self):

accounts = self.file\_handler.get\_accounts()

input\_loop = True

while input\_loop:

username\_attempt = input('Enter username: ')

for account in accounts:

account = account.split(', ')

if username\_attempt == account[0]:

password\_attempt = input('Enter password: ')

if password\_attempt == account[1]:

print('\nLogin successful.')

return

print('Incorrect username or password.')

def add\_student(self):

print('Please enter the student\'s details:\n')

surname = input('Surname: ')

forename = input('Forename: ')

date\_of\_birth = input('Date of birth: ')

home\_address = input('Home address: ')

home\_phone\_number = input('Home phone number: ')

gender = input('Gender: ')

student\_id = self.get\_new\_id()

tutor\_group = self.get\_tutor\_group()

school\_email\_address = student\_id + '@student.treehouseschool.co.uk'

details = [

student\_id, surname, forename, date\_of\_birth,

home\_address, home\_phone\_number, gender,

tutor\_group, school\_email\_address

]

details = ', '.join(details)

self.file\_handler.add\_student(details)

print('\nThe new student has been added.')

print(('His' if gender.lower() == 'male' else 'Her'), 'student ID is', student\_id)

def get\_new\_id(self):

lines = self.file\_handler.get\_students()

if len(lines) <= 1:

return '0000'

last\_line = lines[-2].split(', ')

new\_id = str(int(last\_line[0]) + 1)

zeros = '0' \* (4 - len(new\_id))

new\_id = zeros + new\_id

return new\_id

@staticmethod

def get\_tutor\_group():

return choice(['Amphtill Leaves', 'London Flowers', 'Kempston Stones', 'Cardington Grass'])

def edit\_student\_details(self):

print('Sorry, this feature has not been added yet.')

def print\_student\_details(self):

student\_id = input('Enter student ID: ')

lines = self.file\_handler.get\_students()

details\_found = False

for line in lines:

details = line.split(', ')

if details[0] == student\_id:

details\_found = True

break

if details\_found:

print('ID: ', details[0])

print('Surname: ', details[1])

print('Forename: ', details[2])

print('Date of birth: ', details[3])

print('Home address: ', details[4])

print('Home phone number: ', details[5])

print('Gender: ', details[6])

print('Tutor group: ', details[7])

print('School email address: ', details[8])

else:

print('Student ', student\_id, ' could not be found.')

if \_\_name\_\_ == '\_\_main\_\_':

Main()