**PYTHON – ASSIGNMENT 2**

**STUDENT INFORMATION SYSTEM**

Implement a method that initializes a database connection and creates tables for storing student, course, enrollment, teacher, and payment information.

Data Retrieval: Implement methods to retrieve data from the database. Users should be able to request information about students, courses, enrollments, teachers, or payments.

Implement methods to perform operations.

**CODE:**

import mysql.connector as con

connect = con.connect(host="localhost", user="root", password="root", database="sisdb")

# Calculate course Statistics

def calculate\_statistics():

sql = "select count(enrollment\_id) from enrollments;"

sql1 = " select sum(amount) from payments;"

c = connect.cursor()

c.execute(sql)

list = c.fetchone()

c1 = connect.cursor()

c1.execute(sql1)

list2 = c1.fetchone()

print("------------------------------------------------------------------")

print("The Total no.of courses and their payments are listed below....")

print("The No.of enrollments is:", list[0])

print("The total payments is:", list2[0])

print("-------------------------------------------------------------------")

menu()

# record payment details

def record\_payment\_details():

id = input("Enter Student id: ")

data = (id,)

sql = "select amount,payment\_date from payments where student\_id = %s; "

c = connect.cursor()

c.execute(sql, data)

list = c.fetchall()

for i in list:

print("Amount:", i[0])

print("Payment Date:", i[1])

print("--------------------------------")

menu()

# get payment report

def get\_payment\_report():

id = input("Enter Student id: ")

data = (id,)

sql = "select \* from payments where student\_id = %s; "

c = connect.cursor()

c.execute(sql, data)

list = c.fetchall()

for i in list:

print("Payment id:", i[0])

print("Amount:", i[2])

print("Payment Date:", i[3])

print("--------------------------------")

menu()

# display student info

def student\_info():

def student\_info():

id = input("Enter student id: ")

if isinstance(id, int):

data = (id,)

sql = "select \* from students where student\_id = %s; "

c = connect.cursor()

c.execute(sql, data)

list = c.fetchall()

for i in list:

print("The details of the student are listed below....")

print("First Name:", i[1])

print("Last Name:", i[2])

print("Date Of Birth:", i[3])

print("Email:", i[4])

print("Phone Number:", i[5])

print("--------------------------------")

menu()

else:

print("IdNotfound Exception")

# get enrollment report

def get\_enrollment\_report():

id = input("Enter Course id: ")

data = (id,)

sql = "select \* from enrollments where course\_id = %s; "

c = connect.cursor()

c.execute(sql, data)

list = c.fetchall()

for i in list:

print("Enrollment id:", i[0])

print("Student id:", i[1])

print("Enrollment Date:", i[3])

print("--------------------------------")

menu()

# display course info

def display\_course\_info():

id = input("Enter Course id: ")

data = (id,)

sql = "select \* from courses where course\_id = %s; "

c = connect.cursor()

c.execute(sql, data)

list = c.fetchall()

for i in list:

print("Course Name:", i[1])

print("Credits:", i[2])

print("Teacher Id:", i[3])

print("--------------------------------")

menu()

# assign teacher for the course

def assign\_teacher():

Id = input("Enter Course id: ")

Id1 = input("Enter Teacher id: ")

data = (Id,)

data1 = (Id1,)

sql = "select Course\_name from courses where course\_id = %s;"

sql1 = " select first\_name from teacher where teacher\_id = %s;"

c = connect.cursor()

c.execute(sql, data)

list = c.fetchone()

c1 = connect.cursor()

c1.execute(sql1, data1)

list2 = c1.fetchone()

print("The Teacher", list2[0], " is assigned for the course :", list[0])

menu()

def menu():

print("Select an option:")

print("1.Student Information")

print("2.Course Information")

print("3.Assign Teacher")

print("4.Get Enrollment Report")

print("5.Get Payment Report")

print("6.Record Payment Details")

print("7.Assign Teacher")

print("8.Calculate Statistics ")

print("9.Exit")

option = input("Enter option: ")

if option == '1':

student\_info()

elif option == '2':

display\_course\_info()

elif option == '3':

assign\_teacher()

elif option == '4':

get\_enrollment\_report()

elif option == '5':

get\_payment\_report()

elif option == '6':

record\_payment\_details()

elif option == '7':

assign\_teacher()

elif option == '8':

calculate\_statistics()

elif option == '9':

print("....Exit....")

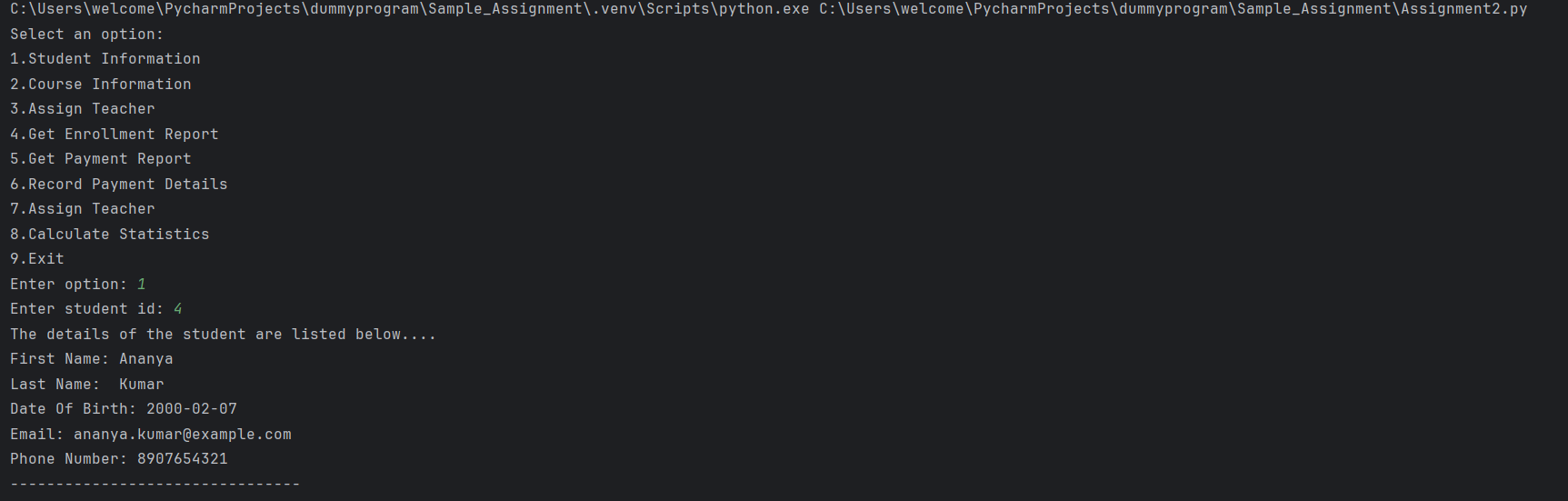
else:

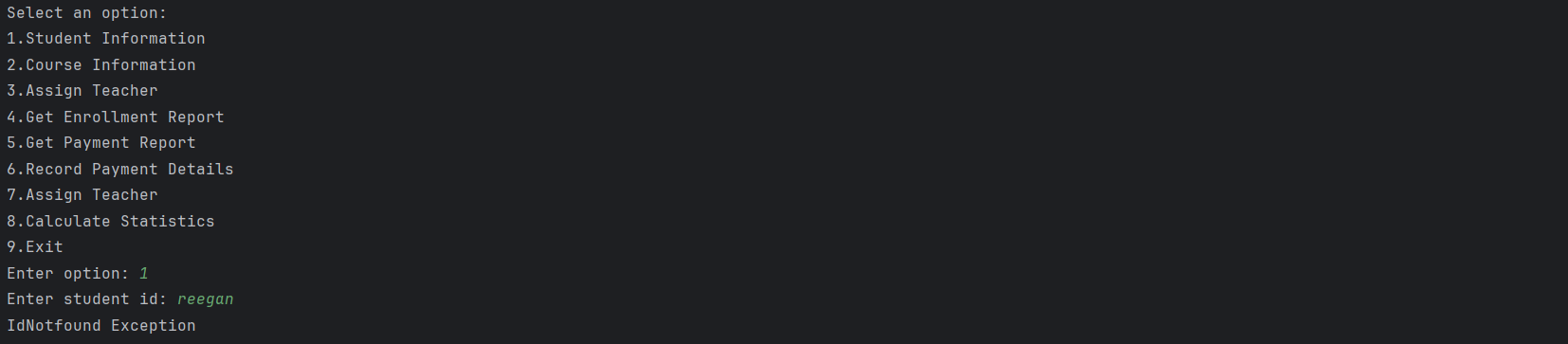
print("Invalid option...\n Try again...")

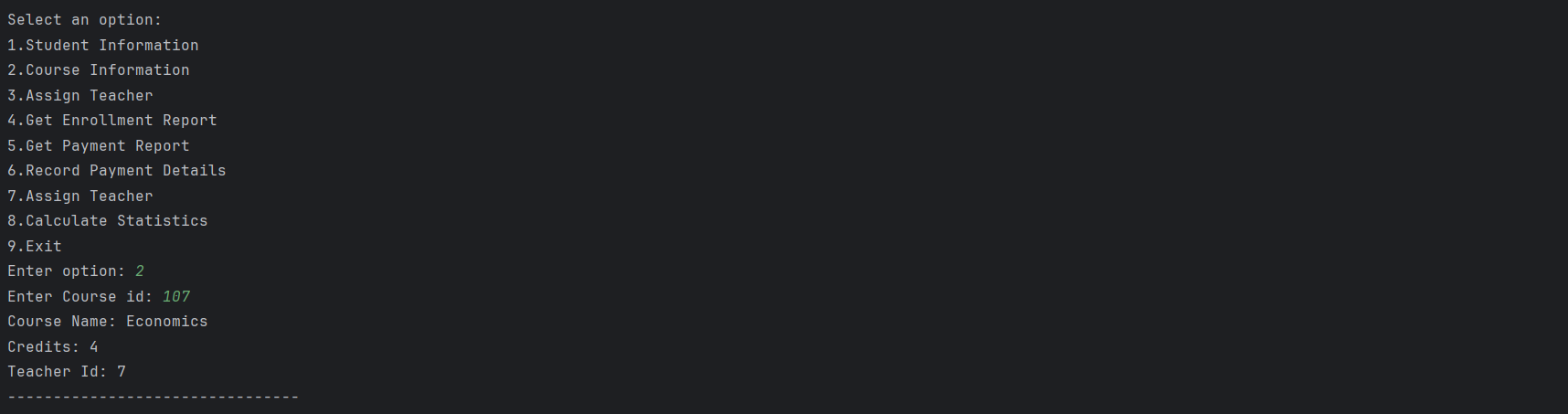
menu()

menu()

**OUTPUT:**

****

****

****



