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**Python Code:**

units\_list = [

    [1, "Introduction to Programming", "Computer Science", "None"],

    [2, "Calculus I", "Mathematics", "None"],

    [3, "Data Structures and Algorithms", "Computer Science", "Introduction to Programming"],

    [4, "Linear Algebra", "Mathematics", "Calculus I"],

    [5, "Physics I", "Physics", "None"],

    [6, "Chemistry I", "Chemistry", "None"],

    [7, "Biology I", "Biology", "None"],

    [8, "Microeconomics", "Economics", "None"],

    [9, "Macroeconomics", "Economics", "None"],

    [10, "Psychology I", "Psychology", "None"],

]

def Retr\_cour\_data(course\_id):

    """Retrieve course data from the units list by course ID."""Creating a Course Information Retrieval System

    for unit in units\_list:

        if unit[0] == course\_id:

            return unit

    return None

def main():

    while True:

        user\_input = input("Enter a course ID to retrieve its details (1-10), or type 'quit' to exit: ")

        if user\_input.lower() == "quit":

            print("Exiting the program...")

            break

        if user\_input.isdigit():

            course\_id = int(user\_input)

            course\_data = Retr\_cour\_data(course\_id)

            if course\_data:

                print(f"\nCourse ID: {course\_data[0]}\n"

                      f"Course Name: {course\_data[1]}\n"

                      f"Department: {course\_data[2]}\n"

                      f"Prerequisites: {course\_data[3]}\n")

            else:

                print(f"No course found with ID {course\_id}. Please enter a valid ID.")

        else:

            print("Invalid input. Please enter a valid course ID or 'quit'.")

if \_\_name\_\_ == "\_\_main\_\_":

    main()

**#Output:**

PS D:\Milan\_Assignment\Programming Principal\session1> d:; cd 'd:\Milan\_Assignment\Programming Principal\session1'; & 'c:\Program Files (x86)\Microsoft Visual Studio\Shared\Python39\_64\python.exe' 'c:\Users\hiten\.vscode\extensions\ms-python.debugpy-2024.10.0-win32-x64\bundled\libs\debugpy\adapter/../..\debugpy\launcher' '63219' '--' 'D:\Milan\_Assignment\Programming Principal\session1\lab\_excercise\_3 and 4 - file 2.py'

Enter a course ID to retrieve its details (1-10), or type 'quit' to exit: 5

Course ID: 5

Course Name: Physics I

Department: Physics

Prerequisites: None

Enter a course ID to retrieve its details (1-10), or type 'quit' to exit: 6

Course ID: 6

Course Name: Chemistry I

Department: Chemistry

Prerequisites: None

Enter a course ID to retrieve its details (1-10), or type 'quit' to exit: 7

Course ID: 7

Course Name: Biology I

Department: Biology

Prerequisites: None

Enter a course ID to retrieve its details (1-10), or type 'quit' to exit: 0

No course found with ID 0. Please enter a valid ID.

Enter a course ID to retrieve its details (1-10), or type 'quit' to exit: 0

No course found with ID 0. Please enter a valid ID.

Enter a course ID to retrieve its details (1-10), or type 'quit' to exit: quit

Exiting the program...