**Module 7: Critical Thinking Assignment**

**Creating Python Programs**

**Source Code:**

# Dictionaries for course details

Room\_No = {

"CSC101": "3004",

"CSC102": "4501",

"CSC103": "6755",

"NET110": "1244",

"COM241": "1411"

}

Instructors = {

"CSC101": "Haynes",

"CSC102": "Alvarado",

"CSC103": "Rich",

"NET110": "Burke",

"COM241": "Lee"

}

Meeting\_Times = {

"CSC101": "8:00 a.m.",

"CSC102": "9:00 a.m.",

"CSC103": "10:00 a.m.",

"NET110": "11:00 a.m.",

"COM241": "1:00 p.m."

}

# Function to get course details

def get\_course\_details(course\_number):

room = Room\_No.get(course\_number)

instructor = Instructors.get(course\_number)

time = Meeting\_Times.get(course\_number)

if room and instructor and time:

print(f"Course Number: {course\_number}")

print(f"Room Number: {room}")

print(f"Instructor: {instructor}")

print(f"Meeting Time: {time}")

else:

print("Course number not found.")

# Main program

def main():

course\_number = input("Enter a course number: ").upper()

get\_course\_details(course\_number)

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

main()

**Result:**

Enter a course number: NET110

Course Number: NET110

Room Number: 1244

Instructor: Burke

Meeting Time: 11:00 a.m.

**Pseudocode:**

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1. **Initialize Dictionaries to Store Course Information:**
   * Create a dictionary named Room\_No that maps course numbers to corresponding room numbers.
   * Create a dictionary named Instructors that maps course numbers to corresponding instructor names.
   * Create a dictionary named Meeting\_Times that maps course numbers to corresponding meeting times.
2. **Define a Function to Retrieve Course Details:**
   * **Function Name:** get\_course\_details
   * **Parameters:** course\_number (a string representing the course number)
   * **Steps inside the Function:**
     1. **Retrieve Room Number:**
        + Access the Room\_No dictionary using course\_number as the key.
        + Store the result in a variable named room.
     2. **Retrieve Instructor Name:**
        + Access the Instructors dictionary using course\_number as the key.
        + Store the result in a variable named instructor.
     3. **Retrieve Meeting Time:**
        + Access the Meeting\_Times dictionary using course\_number as the key.
        + Store the result in a variable named time.
     4. **Check if All Details are Found:**
        + If room, instructor, and time are all not NULL (or not None):
          - Print the course number.
          - Print the room number.
          - Print the instructor name.
          - Print the meeting time.
        + Else:
          - Print "Course number not found."
3. **Define the Main Program Execution:**
   * **Function Name:** main
   * **Steps inside the Function:**
     1. **Prompt User for Course Number:**
        + Display a message to the user asking them to enter a course number.
        + Capture the user input and store it in a variable named course\_number.
        + Convert the input to uppercase to ensure it matches the keys in the dictionaries.
     2. **Call the Function to Get Course Details:**
        + Pass the course\_number to the get\_course\_details function.
4. **Start the Program:**
   * **Condition to Check:**
     1. If the script is executed directly (i.e., \_\_name\_\_ is equal to "\_\_main\_\_"):
        + Call the main function to start the program.

**Screenshot:**

A screenshot of a computer

Description automatically generated

A computer screen shot of a course number

Description automatically generated

**2nd-time Run Output**

A screenshot of a computer

Description automatically generated

**Link for GitHub Repository:**

[github.com/rramya386/Python-Assigments](%20https:/github.com/rramya386/Python-Assigments)