

## Assignment2\_Mehreen Ali Gillani

Q1. What will the following code display? `numbers = [1, 2, 3, 4, 5]` `print(numbers[1:-5])`  
Can you debug and fix the output? The code should return the entire list

The code `print(numbers[1:-5])` will display an empty list `[]` because the slice starts at index 1 and ends at index -5, which is equivalent to index 0 in a 5-element list, resulting in no elements between these indices.

To fix the code to return the entire list

```
print(numbers) or  
print(numbers[:])
```

Q2. Design a program that asks the user to enter a store's sales for each day of the week. The amounts should be stored in a list. Use a loop to calculate the total sales for the week and display the result.

```
# List of days for reference  
days = ['Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday', 'Saturday', 'Sunday']  
sales = [] # Empty list to store sales  
# Get sales for each day  
for day in days:  
    amount = float(input(f"Enter sales for {day}: $"))  
    sales.append(amount)  
  
# Calculate and display total weekly sales  
total = sum(sales)  
print(f"\nTotal weekly sales: ${total:.2f}")
```

Q3. Create a list with at least 5 places you'd like to travel to. Make sure the list isn't in alphabetical order

```
Places = ['Pakistan', 'Turkey', 'Switzerland', 'Malaysia', 'Indonesia']
```

● Print your list in its original order.

```
Print(Places)
```

● Use the `sort()` function to arrange your list in order and reprint your list.

```
Print(Places.sort())
```

● Use the `sort(reverse=True)` and reprint your list.

```
Print(Places.sort(reverse=True))
```

Q4. Write a program that creates a dictionary containing course numbers and the room numbers of the rooms where the courses meet. The program should also create a

dictionary containing course numbers and the names of the instructors that teach each course. After that, the program should let the user enter a course number, then it should display the course's room number, instructor, and meeting time.

```
# Create dictionaries for course information
course_rooms = {
    'CS101': '3004',
    'CS102': '4501',
    'CS103': '6755',
    'NT110': '1244',
    'CM241': '1411'
}

course_instructors = {
    'CS101': 'Haynes',
    'CS102': 'Alvarado',
    'CS103': 'Rich',
    'NT110': 'Burke',
    'CM241': 'Lee'
}

course_times = {
    'CS101': '8:00 a.m.',
    'CS102': '9:00 a.m.',
    'CS103': '10:00 a.m.',
    'NT110': '11:00 a.m.',
    'CM241': '1:00 p.m.'
}

# Get course number from user
course = input("Enter a course number: ").strip()
# Display course information
if course in course_rooms:
    print(f"Room: {course_rooms[course]}")
    print(f"Instructor: {course_instructors[course]}")
    print(f"Time: {course_times[course]}")
else:
    print("Course not found")
```

Q5. Write a program that keeps names and email addresses in a dictionary as key-value pairs. The program should then demonstrate the four options:

```
while True:
    action = input("Action (add, list, quit): ").strip().lower()
    if action == 'quit':
        break
    elif action == 'add':
```

```
name = input("Name: ").strip()
email = input("Email: ").strip()
contacts[name] = email
elif action == 'list':
    for name, email in contacts.items():
        print(f"{name}: {email}")
else:
    print("Invalid action")
```

- add a new name and email address,  
contacts['john'] = 'john@gmail.com'
- change an existing email address, and  
contacts['maria'] = 'maria.rizvi@gmail.com'
- delete an existing name and email address.  
del contacts['john']