Note: Please Try solving these questions to build better understanding, I have attached a solution in last page, please attempt on your own before you go to the solution

Question 1: (loop and conditional statements, Lists)

Display a menu with the following options:

1. Add a new task
2. View all tasks
3. Mark a task as done
4. Exit the program

Allow the user to add tasks to a list.

Display the list of tasks with their corresponding numbers.

Let the user mark a task as done, removing it from the list.

Keep running in a loop until the user chooses to exit.

Question 2: (Dictionaries, simple function)

Write a Python program to manage **Student Attendance**. Your program should:

1. Display a menu with the following options:
    - Add student attendance
    - Check student attendance
    - Exit the program
2. Allow the user to add attendance for a student by entering their name and marking them as either **'present'** or **'absent'**.
3. Allow the user to check a student's attendance status by entering their name.
4. Keep running in a loop until the user chooses to exit.

Ensure that your program handles invalid inputs gracefully.

Regards,

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Solutions:

Question 1:

```
todo_list = []


while True:
    print("\n--- To-Do List Manager ---")
    print("1. Add task")
    print("2. View tasks")
    print("3. Mark task as done")
    print("4. Exit")

    choice = input("Enter your choice (1-4): ")

    if choice == '1':
        task = input("Enter a new task: ")
        todo_list.append(task)
        print("Task added successfully!")
    elif choice == '2':
        if not todo_list:
            print("Your to-do list is empty.")
```

```
    else:
        print("Your To-Do List:")
        for index, task in enumerate(todo_list, start=1):
            print(f"{index}. {task}")
elif choice == '3':
    if not todo_list:
        print("Your to-do list is empty.")
    else:
        print("Your To-Do List:")
        for index, task in enumerate(todo_list, start=1):
            print(f"{index}. {task}")
        task_num = input("Enter the number of the task to mark as done: ")
        if task_num.isdigit() and 1 <= int(task_num) <= len(todo_list):
            done_task = todo_list.pop(int(task_num) - 1)
            print(f"Marked '{done_task}' as done!")
        else:
            print("Invalid task number.")
elif choice == '4':
    print("Thank you for using the To-Do List Manager. Goodbye!")
    break
else:
    print("Invalid choice. Please try again.")
```

Question 2:

```
def manage_student_attendance():
    attendance = {}

    while True:
        print("\n--- Student Attendance Manager ---")
        print("1. Add student attendance")
        print("2. Check student attendance")
        print("3. Exit")

        choice = input("Enter your choice (1-3): ")

        if choice == '1':
            name = input("Enter student name: ")
            status = input("Enter status ('present' or 'absent'): ").lower()
            if status in ['present', 'absent']:
                attendance[name] = status
                print(f"Attendance for {name} marked as {status}.")
            else:
                print("Invalid status. Please enter 'present' or 'absent'.")
```

```
        elif choice == '2':
            name = input("Enter student name to check: ")
            if name in attendance:
                print(f"{name}'s attendance status: {attendance[name]}")
            else:
                print(f"{name} not found in attendance list.")
        elif choice == '3':
            print("Exiting Student Attendance Manager.")
            break
        else:
            print("Invalid choice. Please try again.")

manage_student_attendance()
#note  this last line runs the function
```