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In [ ]: # Simple Appointment Manager
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appointments = []
next_id = 1 # ID counter for appointments

def add_appointment():
    """Add a new appointment to the list."""
    global next_id

    print("\n--- Add New Appointment ---")
    date = input("Enter date (YYYY-MM-DD): ")
    time = input("Enter time (HH:MM): ")
    description = input("Enter description: ")

    appointment = {
        "id": next_id,
        "date": date,
        "time": time,
        "description": description
    }

    appointments.append(appointment)
    print(f"Appointment added successfully with ID: {next_id}")

    next_id += 1

def view_appointments():
    """View all saved appointments."""
    print("\n--- All Appointments ---")
    if len(appointments) == 0:
        print("No appointments found.")
        return

    for appt in appointments:
        print(f"ID: {appt['id']}")
        print(f"Date: {appt['date']}")
        print(f"Time: {appt['time']}")
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        print(f"Description: {appt['description']}")  
        print("-----")  
  
def search_appointments():  
    """Search appointments by date."""  
    print("\n--- Search Appointments by Date ---")  
    search_date = input("Enter date (YYYY-MM-DD): ")  
  
    found = False  
    for appt in appointments:  
        if appt["date"] == search_date:  
            if not found:  
                print(f"\nAppointments on {search_date}:")  
            print(f"ID: {appt['id']}")  
            print(f"Time: {appt['time']}")  
            print(f"Description: {appt['description']}")  
            print("-----")  
            found = True  
  
    if not found:  
        print("No appointments found on this date.")  
  
def delete_appointment():  
    """Delete an appointment by its ID."""  
    print("\n--- Delete Appointment ---")  
    if len(appointments) == 0:  
        print("No appointments to delete.")  
        return  
  
    try:  
        appt_id = int(input("Enter appointment ID to delete: "))  
    except ValueError:  
        print("Invalid ID. Please enter a number.")  
        return  
  
    for appt in appointments:  
        if appt["id"] == appt_id:  
            appointments.remove(appt)  
            print(f"Appointment with ID {appt_id} deleted successfully.")  
            return
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print("Appointment with this ID was not found.")

def edit_appointment():
    """Edit an existing appointment by its ID."""
    print("\n--- Edit Appointment ---")
    if len(appointments) == 0:
        print("No appointments to edit.")
        return

    try:
        appt_id = int(input("Enter appointment ID to edit: "))
    except ValueError:
        print("Invalid ID. Please enter a number.")
        return

    for appt in appointments:
        if appt["id"] == appt_id:
            print(f"\nCurrent data for appointment ID {appt_id}:")
            print(f"Date: {appt['date']}")
            print(f"Time: {appt['time']}")
            print(f"Description: {appt['description']}")

            print("\nEnter new values (or press Enter to keep the current value):")
            new_date = input(f"New date (YYYY-MM-DD) [{appt['date']}]: ")
            new_time = input(f"New time (HH:MM) [{appt['time']}]: ")
            new_description = input(f"New description [{appt['description']}]: ")

            if new_date.strip() != "":
                appt["date"] = new_date
            if new_time.strip() != "":
                appt["time"] = new_time
            if new_description.strip() != "":
                appt["description"] = new_description

            print(f"Appointment with ID {appt_id} updated successfully.")
            return

    print("Appointment with this ID was not found.")
```

```
def main_menu():
    """Main menu loop for the appointment manager."""
    while True:
        print("\n===== Appointment Manager =====")
        print("1. Add appointment")
        print("2. View all appointments")
        print("3. Search appointments by date")
        print("4. Delete appointment")
        print("5. Edit appointment")
        print("6. Exit")
        print("===== ")

        choice = input("Enter your choice (1-6): ")

        if choice == "1":
            add_appointment()
        elif choice == "2":
            view_appointments()
        elif choice == "3":
            search_appointments()
        elif choice == "4":
            delete_appointment()
        elif choice == "5":
            edit_appointment()
        elif choice == "6":
            print("Exiting program. Goodbye!")
            break
        else:
            print("Invalid choice. Please enter a number from 1 to 6.")

# Program entry point
if __name__ == "__main__":
    main_menu()
```

===== Appointment Manager =====

1. Add appointment
2. View all appointments
3. Search appointments by date
4. Delete appointment
5. Edit appointment
6. Exit

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In []: