

The add doctor function takes in a doctor's name and specialty.

```
Please make your choice: 1
Please enter the doctor's name: Toby Washington
======= Specialties =======
specialty
Ophthalmologist
Gastroenterologist
Allergist
Oncologist
Otolaryngologist
Neurologist
Cardiologist
gynecologist
Pediatrician
Psychiatrist
Dermatologist
Nutritionist
cardiologist
Urologist
Endocrinologist
Radiologist
Please enter a specialty: Radiologist
Selected Record: [202, Chanel Dugas, Radiologist, 11]
```

```
====== Department List =======
name
Cardiology
Finance
Gastroenterology
Obstetrics/Gynecology
Microbiology
Pediatric
Neurology
Oncology
Ophthalmology
Pain Management
Patient Services
Radiology
Rheumatology
Urology
Pharmacy
Otolaryngology
Nutrition
Human Resources
ICU
General Surgery
Psychiatry
Accident and emergency
Dermatology
Allergy and Immunology
Please enter a departnment name: Radiology
Selected Record: [86]
Inserted Record: [255, Toby Washington, Radiologist, 86]
```

### Problem 2 - Add Patient

The add patient function takes in a name, gender, age and address.

```
Please make your choice: 2
Please enter the patient name: James Bond
Please enter the patient's gender M/F: M
Please enter the patient's age: 33
Please enter the patient's address: 123 Spy St.
Inserted Record: [256, James Bond, M, 33, 123 Spy St., null]
```

Error checking is done for the gender and age fields.

```
Please make your choice: 2
Please enter the patient name: Martha Stevens
Please enter the patient's gender M/F: f
Please enter M or F.
Please enter the patient's gender M/F: 12
Please enter M or F.
Please enter the patient's gender M/F: F
Please enter the patient's age: 150
Age must be in range: 0 - 130
Please enter the patient's age: -1
Age must be in range: 0 - 130
Please enter the patient's age: 21
Please enter the patient's address: 12123 Example Rd. Riverside, CA
Inserted Record: [257, Martha Stevens, F, 21, 12123 Example Rd. Riverside, CA, null]
```

The age input must be between 0 and 150.

## **Problem 3 - Add Appointment**

The add appointment functions creates a new available appointment for a doctor.

====== Department List ======= name Cardiology Finance Gastroenterology Obstetrics/Gynecology Microbiology Pediatric Neurology Oncology Ophthalmology Pain Management Patient Services Radiology Rheumatology Urology Pharmacy Otolaryngology Nutrition Human Resources ICUGeneral Surgery Psychiatry Accident and emergency Dermatology Allergy and Immunology Please enter a departnment name: Radiology Selected Record: [86] Inserted Record: [255, Toby Washington, Radiologist, 86] Error checking is done for selecting a time slot.

```
======= Time Slot Options ========
time slot
10:00-17:00
8:00-10:00
10:00-15:00
8:00-10:30
13:00-15:00
14:00-16:00
8:00-17:00
8:00-10:50
Choose a time slot: 9:00-14:00
Enter one of the listed time slot options
Choose a time slot: j
Enter one of the listed time slot options
Choose a time slot: 13:00-15:00
Inserted Record: [553, 2021-09-11, 13:00-15:00, AC]
```

## **Problem 4 - Make Appointment**

The make appointment function lets the user make an appointment from appointments which are available ('AV'). The appointment is then marked as active ('AC').

```
Please make your choice: 4
Please enter the patient ID: 0
======= Hospital List =======
name
UCLA Medical Center
Cedars-Sinai Medical Center
UCSF Medical Center
Stanford Health Care- Stanford Hospital
Keck Medical Center of USC
Please enter the hospital name: ucla
Selected Record: [0, UCLA Medical Center]
====== Department List =======
Cardiology
Finance
Gastroenterology
Obstetrics/Gynecology
Microbiology
Pediatric
Neurology
Oncology
Ophthalmology
Pain Management
Patient Services
Radiology
Rheumatology
Urology
Pharmacy
Otolaryngology
Nutrition
Human Resources
ICU
General Surgery
Psychiatry
Accident and emergency
Dermatology
Allergy and Immunology
Endocrinology
_____
Please enter a departnment name: cardio
Selected Record: [0, Cardiology, 0]
```

```
doctor_id
              name
                       name
118
       Wayne Robinson Cardiology
119
        Stephanie Thompson
                                Cardiology
120
       Steven Richardson
                               Cardiology
                    Cardiology
Cardiology
121
       Amy Diaz
122
       Harry Ross
       Lillian Powell Cardiology
123
124
       Paul Harris Cardiology
125
       Elizabeth Hernandez
                                Cardiology
126
       Mildred James Cardiology
127
       Brian Flores
                       Cardiology
128
       Douglas Gonzalez
                                Cardiology
129
       Mary Brown Cardiology
Gloria Cox Cardiology
130
131
       Samuel Sanders Cardiology
       Louis Johnson Cardiology
Christina King Cardiology
132
133
134
       Phillip Wilson Cardiology
       Bobby Baker Cardiology
Philip Edwards Cardiology
135
136
137
       Christine Mitchell
                                Cardiology
       Todd Sanchez
138
                       Cardiology
139
       Helen Gonzales Cardiology
140
       Timothy Jones Cardiology
        Andrea Perry
141
                       Cardiology
                     Cardiology
142
       Marie White
```

```
Sara Collins Cardiology
Ashley Ramirez Cardiology
145
       Jason Henderson Cardiology
146
       Jerry Evans Cardiology
      Emily Washington Cardiology
147
       Maria Price Cardiology
148
149
       Arthur Alexander
                       Cardiology
150
       Judy Morris Cardiology
_____
Please enter the doctor ID: 121
======= Available Appointments ========
appnt_id
             adate
     2021-11-18
Please enter the appointment ID: 21
Updated Record: [21, 2021-11-18, 10:00-17:00, AC]
Success!
```

#### No doctors available

Error checking is done when accepting the inputs for names, ids, and appointment numbers. When there are no appointments for the doctors of a specific department, the program will return to the menu.

```
Please make your choice: 4
Please enter the patient ID: 10321
That patient does not exist!
Please enter the patient ID: 100
======= Hospital List =======
UCLA Medical Center
Cedars-Sinai Medical Center
UCSF Medical Center
Stanford Health Care- Stanford Hospital
Keck Medical Center of USC
_____
Please enter the hospital name: washington
Did not find a hospital with that name.
Please enter the hospital name: usc
Selected Record: [4, Keck Medical Center of USC]
======= Department List =======
name
Endocrinology
Cardiology
Finance
Gastroenterology
Obstetrics/Gynecology
Microbiology
Pediatric
Neurology
Oncology
Ophthalmology
Pain Management
Patient Services
Radiology
Rheumatology
Urology
Pharmacy
Otolaryngology
Nutrition
Human Resources
General Surgery
Psychiatry
Accident and emergency
Dermatology
Allergy and Immunology
Endocrinology
_____
Please enter a departnment name: mental health
Did not find a department with that name.
Please enter a departnment name: psyc
Selected Record: [120, Psychiatry, 4]
========= Doctor List ==========
There are no doctors in this department
```

#### No appointments available

The program also returns to the main menu when the chosen doctor has no available appointments.

```
Please enter a departnment name: cardio
Selected Record: [0, Cardiology, 0]
========== Doctor List ===========
doctor_id
            name name
     Wayne Robinson Cardiology
118
119
        Stephanie Thompson Cardiology
120
        Steven Richardson
                                 Cardiology
        Amy Diaz Cardiology
Harry Ross Cardiology
121
122
        Lillian Powell Cardiology
123
124
        Paul Harris
                        Cardiology
125
        Elizabeth Hernandez
                                 Cardiology
        Mildred James Cardiology
126
127
        Brian Flores
                        Cardiology
128
        Douglas Gonzalez
                                Cardiology
        Mary Brown Cardiology
Gloria Cox Cardiology
129
130
       Samuel Sanders Cardiology
Louis Johnson Cardiology
Christina King Cardiology
Phillip Wilson Cardiology
Bobby Baker Cardiology
131
132
133
134
135
        Philip Edwards Cardiology
136
137
        Christine Mitchell
                                 Cardiology
138
        Todd Sanchez Cardiology
        Helen Gonzales Cardiology
139
      Timothy Jones Cardiology
Andrea Perry Cardiology
Marie White Cardiology
Sara Collins Cardiology
140
141
142
143
144
      Ashley Ramirez Cardiology
145
       Jason Henderson Cardiology
146
       Jerry Evans Cardiology
      Emily Washington Cardiology
147
148
      Maria Price Cardiology
149
        Arthur Alexander Cardiology
150
        Judy Morris Cardiology
_____
Please enter the doctor ID: 118
======= Available Appointments ========
    _____
This doctor has no appointments available!
```

## Problem 5 - List Appointments in a Date Range

The program lists all appointments of a given doctor with a given range of dates.

## **Problem 6 - List Available Appointments**

The program lists all the appointments available for a given doctor.

```
Please make your choice: 6
======== Hospital List ========
UCLA Medical Center
Cedars-Sinai Medical Center
UCSF Medical Center
Stanford Health Care- Stanford Hospital
Keck Medical Center of USC
Please enter the hospital name: ucla
Selected Record: [0, UCLA Medical Center]
name
Cardiology
Finance
Gastroenterology
Obstetrics/Gynecology
Microbiology
Pediatric
Neurology
Oncology
Ophthalmology
Pain Management
Patient Services
Radiology
Rheumatology
Urology
Pharmacy
Otolaryngology
Nutrition
Human Resources
General Surgery
Psychiatry
Accident and emergency
Dermatology
Allergy and Immunology
Endocrinology
Please enter a departnment name: cardio
Selected Record: [0, Cardiology, 0]
adate
2021-09-21
Please enter the data. MM/DD/YY: 09/21/21
name specialty
                                                                                did
                                                                                        appt_id doctor_id
                                            120 Steven Richardson Cardiologist
```

Problem 7 - List Amount of Different Appointments per doctor

The program list how many different types of appointments every doctor has

		Noah Hansen	1
Please make your	choice: 7	Nilsa Cavanaugh	1
name appointm	menttypes	Myron Gibson	1
Yvette Lane	1	Myrl Aguiar	1
Wayne Robinson	1	Milton Fletcher	1
Timothy Jones	1	Mildred James	1
Tiffany Mills	2	Martin Bryant	1
Theodore Stewart	1	Lynn Rose	1
Steven Richardso	on 1	Lona Burchett	1
Stephanie Thomps	son 1	Lillie Rogers	
Sophia Fields	1	Larry Russell	1
Shaun Obrien	1	Kristy Keller	1
Rufus Lloyd	1	Kristopher King	1
Ruby Hill	1	Kirk Ruiz	1
Rossana Staton	1	Kim West	1
Rosemary Pena	3	Kevin Roberson	1
Rita Brock	2	Kent Cole	2
Randy Schultz	1	Kenny Hall	1
Randy Bell	1	Kenneth Rodrigue	ez 1
Phillip Wilson	1	Kelly Bailey	1
Paul Harris	2	Kathi Wimberly	1
Patricia Brady	1	Judy Morris	
Palmer Peralta	1	Josefina Neal	1
Olga Guerrero	1	Jonathan Lee	
Norma Smith	1	Joella Estrella	1
Noah Hansen	1	Jenny Jackson	1

Jacqueline Simmo		1
Irvin Kennedy		
Heather Perez		
Gloria Cox	2	
Gertrude Warren	2	
Gabriel Taylor	1	
Fredrick Smith		
Etta Rosen	2	
Emiko Braun	1	
Elizabeth Hernar	ndez	1
Edwin Lynch	1	
Edgar Copeland	1	
Dwayne Delgado	1	
Douglas Gonzalez	Z	1
Diane Davidson	1	
Dexter Johnson	1	
Derek Andrews	1	
Dannette Whitley	/	1
Damon Baldwin	1	
Colin Williams	1	
Clara Rowe	2	
Christina Wilson	ı	1
Calvin Morrison	1	
Brian Flores	1	
Bradley Holmes	1	
Billie Carpenter	c	1
Benny Terry	1	
Benjamin Nelson	1	
Becky Horton	1	
Beatrice Myers	1	
Asuncion Looney		
_	1	
Antoinette Rodri	iguez	1
Amy Diaz	ĭ	
Alvin Saunders	1	
Adrian Garrett	1	
Adriana Wooden	1	

# Problem 8

The program lists the number of appointments a doctor has with a given status.

```
Please make your choice: 8
Please enter the appointment status (PA, AC, AV, WL): PA
name num_patients
Yvette Lane
Adrian Garrett 2
Rita Brock
Phillip Wilson 2
Kent Cole
Theodore Stewart
Bradley Holmes 1
Mildred James
Nilsa Cavanaugh 1
Kelly Bailey
Elizabeth Hernandez
Becky Horton
Lona Burchett
Damon Baldwin
Brian Flores
Palmer Peralta 1
Jacqueline Simmons
Lynn Rose
Shaun Obrien
Ruby Hill
Gloria Cox
Lillie Rogers
Asuncion Looney
Randy Bell
Emiko Braun
Judy Morris
Milton Fletcher
Heather Perez
Kristopher King
Irvin Kennedy
Dwayne Delgado
Benny Terry
Rufus Lloyd
Gertrude Warren 1
Rosemary Pena
Larry Russell
Colin Williams
Edwin Lynch
Stephanie Thompson
Kevin Roberson 1
Gabriel Taylor
Alvin Saunders
Josefina Neal
Myron Gibson
Diane Davidson
Jonathan Lee
Kirk Ruiz
Norma Smith
Clara Rowe
Ashley Ramirez
Benjamin Nelson 1
Adriana Wooden
Noah Hansen
Tiffany Mills
                1
Dannette Whitley
Antoinette Rodriguez
Billie Carpenter
```

The problem checks for a correct input which is one of the four listed.

```
Please make your choice: 8
Please enter the appointment status (PA, AC, AV, WL): fa
Not a valid input!
Please enter the appointment status (PA, AC, AV, WL): AV
       num_patients
name
Steven Richardson
                        1
Kenneth Rodriguez
                        1
Rossana Staton 1
Myrl Aguiar
               1
Kent Cole
               1
Christina Wilson
                        1
Kenny Hall
              1
Etta Rosen
                1
Sophia Fields
                1
```