#### **Tanner Swanson**

Images are slightly cropped for readability. Uncropped images are included in the pdf.

# 1) Add new Employee + 2) View Employee:

```
Which operation do you want to do (add, modify, view, or remove)?add
Which table is this for (Employee, Dependent, Department, Dept Location)?Employee
Enter value for Fname, just enter NA to ignore attribute (for modify)John2 Enter value for Minit, just enter NA to ignore attribute (for modify)B
Enter value for Lname, just enter NA to ignore attribute (for modify)Smith
Enter value for Ssn, just enter NA to ignore attribute (for modify)111111111
Enter value for Bdate, just enter NA to ignore attribute (for modify)2000-01-01
Enter value for Address, just enter NA to ignore attribute (for modify)233 Glenbrook RD, Storrs, CT
Enter value for Sex, just enter NA to ignore attribute (for modify)M
Enter value for Salary, just enter NA to ignore attribute (for modify)35000
Enter value for Super_Ssn, just enter NA to ignore attribute (for modify)333445555
Enter value for Dno, just enter NA to ignore attribute (for modify)1
Which operation do you want to do (add, modify, view, or remove)?view
Which table is this for (Employee, Dependent, Department, Dept_Location)?Employee
Enter value for Ssn, just enter NA to ignore attribute (for modify)1111111111
Select Details: ('John2', 'B', 'Smith', '1111111111', datetime.date(2000, 1, 1), '233 Glenbrook RD, Storrs, CT', 'M', Decimal
Department Name: ('Headquarters',)
Manager Name: ('Franklin', 'T', 'Wong')
Dependents: []
Which operation do you want to do (add, modify, view, or remove)?
```

# 3) Modify Employee:

```
Which operation do you want to do (add, modify, view, or remove)?modify
Which table is this for (Employee, Dependent, Department, Dept_Location)?Employee
Enter value for Ssn, just enter NA to ignore attribute (for modify)11111111
Select Details: ('John2', 'B', 'Smith', '111111111', datetime.date(2000, 1, 1), '233 Glenbrook RD, Storrs, CT',
Enter value for Address, just enter NA to ignore attribute (for modify)hello world
Enter value for Sex, just enter NA to ignore attribute (for modify)NA
Enter value for Salary, just enter NA to ignore attribute (for modify)NA
Enter value for Dno, just enter NA to ignore attribute (for modify)NA
Enter value for Dno, just enter NA to ignore attribute (for modify)NA
Which operation do you want to do (add, modify, view, or remove)?view
Which table is this for (Employee, Dependent, Department, Dept_Location)?Employee
Enter value for Ssn, just enter NA to ignore attribute (for modify)111111111
Select Details: ('John2', 'B', 'Smith', '1111111111', datetime.date(2000, 1, 1), 'hello world', 'M', Decimal('350)
Department Name: ('Headquarters',)
Manager Name: ('Franklin', 'T', 'Wong')
Dependents: []
```

### 4) Remove Employee:

```
Which operation do you want to do (add, modify, view, or remove)?remove
Which table is this for (Employee, Dependent, Department, Dept_Location)?Employee
Enter value for Ssn, just enter NA to ignore attribute (for modify)111111111
Read Details: ('John2', 'B', 'Smith', '1111111111', datetime.date(2000, 1, 1), 'hello world', 'M', Decid Do you want to delete? Y\NY
Which operation do you want to do (add, modify, view, or remove)?view
Which table is this for (Employee, Dependent, Department, Dept_Location)?Employee
Enter value for Ssn, just enter NA to ignore attribute (for modify)111111111
Incorrect Key. No record found using this key.
```

### 5) Add Dependent:

```
Which operation do you want to do (add, modify, view, or remove)?add
Which table is this for (Employee, Dependent, Department, Dept_Location)?Dependent
Enter value for Ssn, just enter NA to ignore attribute (for modify)11111111
Read Details: [('John2', 'B', 'Smith', '111111111', datetime.date(2000, 1, 1), '233 Glenbrook RD, Storrs, CT', 'M',
Enter value for Essn, just enter NA to ignore attribute (for modify)11111111
Enter value for Dependent_Name, just enter NA to ignore attribute (for modify)Michael
Enter value for Sex, just enter NA to ignore attribute (for modify)2001-01-01
Enter value for Relationship, just enter NA to ignore attribute (for modify)Son
Which operation do you want to do (add, modify, view, or remove)?view
Which table is this for (Employee, Dependent, Department, Dept_Location)?Employee
Enter value for Ssn, just enter NA to ignore attribute (for modify)111111111
Select Details: ('John2', 'B', 'Smith', '1111111111', datetime.date(2000, 1, 1), '233 Glenbrook RD, Storrs, CT', 'M',
Department Name: ('Headquarters',)
Manager Name: ('Franklin', 'T', 'Wong')
Dependents: [('Michael',)]
```

## 6) Remove Dependent:

```
Which operation do you want to do (add, modify, view, or remove)?remove
Which table is this for (Employee, Dependent, Department, Dept_Location)?Dependent
Enter value for Ssn, just enter NA to ignore attribute (for modify)11111111
Select Details: [('111111111', 'Michael', 'M', datetime.date(2001, 1, 1), 'Son')]
Enter value for Essn, just enter NA to ignore attribute (for modify)11111111
Enter value for Dependent_name, just enter NA to ignore attribute (for modify)Michael
Do you want to delete? Y\NY
Which operation do you want to do (add, modify, view, or remove)?view
Which table is this for (Employee, Dependent, Department, Dept_Location)?Employee
Enter value for Ssn, just enter NA to ignore attribute (for modify)111111111
Select Details: ('John2', 'B', 'Smith', '1111111111', datetime.date(2000, 1, 1), '233 Glenbrook RD, Storrs, CT'
Department Name: ('Headquarters',)
Manager Name: ('Franklin', 'T', 'Wong')
Dependents: []
```

### 7) Add Department + 8) View Department:

```
Which operation do you want to do (add, modify, view, or remove)?add
Which table is this for (Employee, Dependent, Department, Dept_Location)?Department
Enter value for Dname, just enter NA to ignore attribute (for modify)Defense
Enter value for Mgr_ssn, just enter NA to ignore attribute (for modify)123456789
Enter value for Mgr_start_date, just enter NA to ignore attribute (for modify)2024-04-10
Which operation do you want to do (add, modify, view, or remove)?view
Which table is this for (Employee, Dependent, Department, Dept_Location)?Department
Enter value for Dnumber, just enter NA to ignore attribute (for modify)3
{'Dnumber': '3'}
Department Details: ('Defense', 3, '123456789', datetime.date(2024, 4, 10))
Manager Name: ('John', 'B', 'Smith')
Department Locations: []
```

## 9) Remove Department:

```
Which operation do you want to do (add, modify, view, or remove)?remove
Which table is this for (Employee, Dependent, Department, Dept_Location)?Department
Enter value for Dnumber, just enter NA to ignore attribute (for modify)3
Read Details: ('Defense', 3, '123456789', datetime.date(2024, 4, 10))
Do you want to delete? Y\NY
Which operation do you want to do (add, modify, view, or remove)?view
Which table is this for (Employee, Dependent, Department, Dept_Location)?Department
Enter value for Dnumber, just enter NA to ignore attribute (for modify)3
Incorrect Key. No record found using this key.
```

# 10) Add Dept\_Location:

```
Which operation do you want to do (add, modify, view, or remove)?add
Which table is this for (Employee, Dependent, Department, Dept_Location)?Dept_Location
Enter value for Dnumber, just enter NA to ignore attribute (for modify)1
Read Details: [('Headquarters', 1, '888665555', datetime.date(1981, 6, 19))]
Enter value for Dnumber, just enter NA to ignore attribute (for modify)1
Enter value for Dlocation, just enter NA to ignore attribute (for modify)Storrs
Which operation do you want to do (add, modify, view, or remove)?view
Which table is this for (Employee, Dependent, Department, Dept_Location)?Department
Enter value for Dnumber, just enter NA to ignore attribute (for modify)1
Department Details: ('Headquarters', 1, '888665555', datetime.date(1981, 6, 19))
Manager Name: ('James', 'E', 'Borg')
Department Locations: [('Houston',), ('Storrs',)]
```

## 11) Remove Dept\_Location

```
Which operation do you want to do (add, modify, view, or remove)?remove
Which table is this for (Employee, Dependent, Department, Dept_Location)?Dependent
Enter value for Ssn, just enter NA to ignore attribute (for modify)111111111
Select Details: [('111111111', 'Michael', 'M', datetime.date(2001, 1, 1), 'Son')]
Enter value for Essn, just enter NA to ignore attribute (for modify)111111111
Enter value for Dependent_name, just enter NA to ignore attribute (for modify)Michael
Do you want to delete? Y\NY
Which operation do you want to do (add, modify, view, or remove)?view
Which table is this for (Employee, Dependent, Department, Dept_Location)?Employee
Enter value for Ssn, just enter NA to ignore attribute (for modify)111111111
Select Details: ('John2', 'B', 'Smith', '1111111111', datetime.date(2000, 1, 1), '233 Glenbrook RD, Storrs, C
Department Name: ('Headquarters',)
Manager Name: ('Franklin', 'T', 'Wong')
Dependents: []
```

Locks in action (video file also included):

https://youtu.be/Y8GpCnq0LIA