

# UAB Hospital System

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In this proposed model I created the following class with their attributes

1. Class: HospitalEmployee.java

This is the super class for the classes

- a. Administrator
- b. Doctor
- c. Janitor
- d. Nurse
- e. Surgeon
- f. Receptionist

This Hospital Employee has main three ***protected variables*** (empRole, empName, empBlazerId) which are String in nature.

It has constructor to initialize these variables.

And also this class has set of setter and getter methods for all the variables with toString() method overridden to display employee details.

With the help of these it makes my application to easy for accessing name, role and blazerid initialization in each of the subclasses of Hospital employee and also mutator methods.

## 2. Class: Administrator.java

This is subclass of hospital employee has constructor to initialize and also it has its own private variable called ***deparment(speciality)*** with its setter and getter methods.

## 3. Class Janitor.java

This is subclass of hospital employee has constructor to initialize and also it has its own private variable called ***deparment(speciality) and Sweeping*** with its setter and getter methods.

## 4. Class Nurse.java

This is subclass of hospital employee has constructor to initialize and also it has its own private variable called ***num\_patients*** with its setter and getter methods.

## 5. Class Receptionist.java

This is subclass of hospital employee has constructor to initialize and also it has its own private variable called ***deparment and answering*** with its setter and getter methods.

## 6. Class Surgeon.java

This is subclass of hospital employee has constructor to initialize and also it has its own private variable called ***deparment(speciality)& operating*** with its setter and getter methods.

## 7. StartUp.java

This class is the main class from where the execution of the application takes place in this class complete implantation is done with following attributes  
Methods

a. Welcome() : display the welcome message

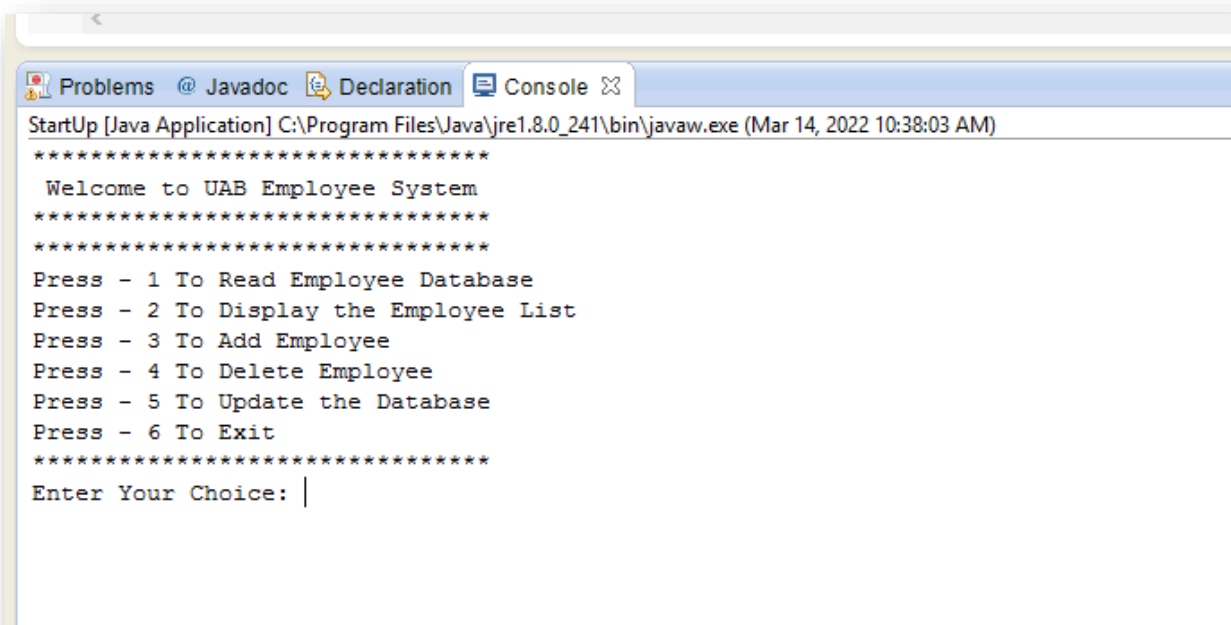
- b. `displayOptions()`: displays the options that need to be selected to run the application
- c. `handleInput()`: it is used to take userinput and call the methods according to the options selected by the user.
- d. `readDatabase()`: this method is created to read the file **uabEmployee.txt** and store them in array of object
- e. `displayEmployees()`: this method is used to display all the records available in the array of objects.
- f. `addEmployee()`: this method add employee depending on the case selected from the user with is selected by `displayAddOptions()`
- g. `displayAddOptions()`: this method display the list of employees to be added like doctor, surgeon, janitor, administrator, nurse, receptionist these will be listed and asked to add whom.
- h. `employeeInputs()`: this method takes common inputs like `empName`, `EmpRole`, `empBlazerId` which will called whenever we add any employee which avoids our burden of adding them again and again.
- i. `updateDatabase()`: this method update all the records available in the object to **uabEmployee.txt** file
- j. `Exit()`: this function exits the system.

This class has imported with libraries like `java.io` for file reading and writing classes `java.util` for scanner class.

# Output Screens

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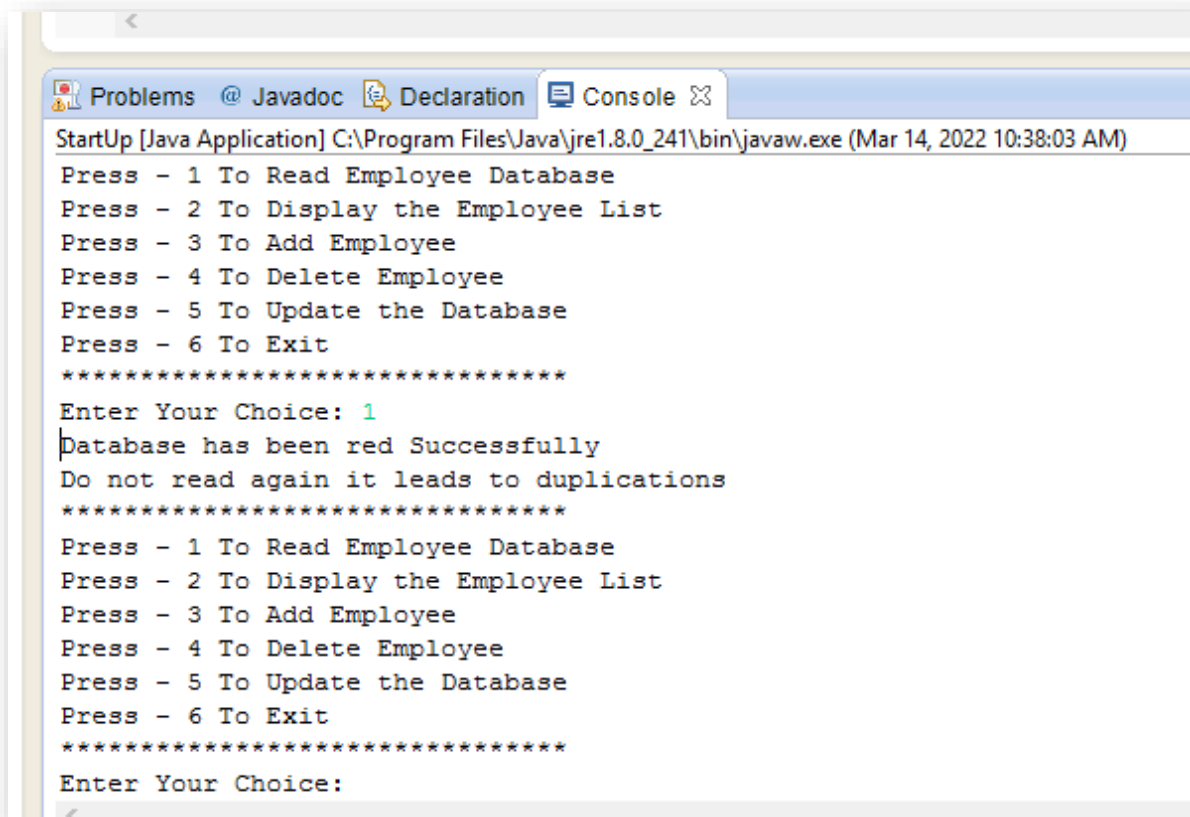
## First Screen after Running



The screenshot shows a Java application window titled "StartUp [Java Application] C:\Program Files\Java\jre1.8.0\_241\bin\javaw.exe (Mar 14, 2022 10:38:03 AM)". The window has tabs for "Problems", "Javadoc", "Declaration", and "Console". The "Console" tab is active, displaying the following text:

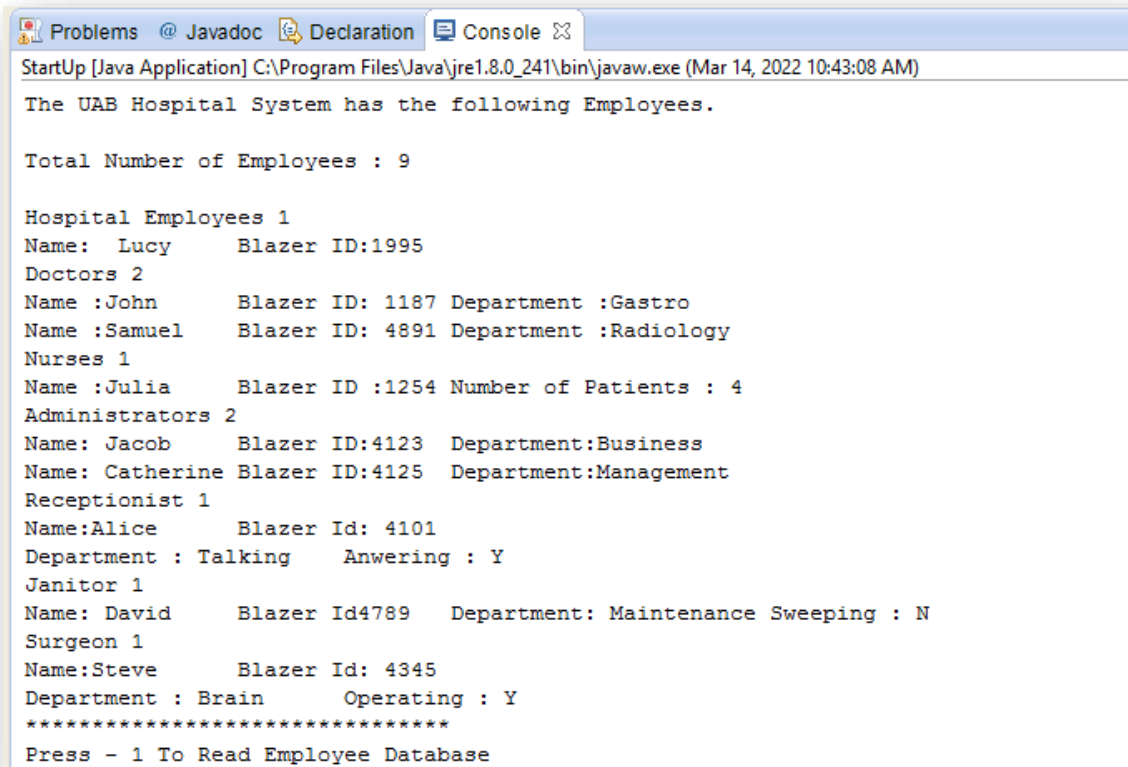
```
*****  
Welcome to UAB Employee System  
*****  
*****  
Press - 1 To Read Employee Database  
Press - 2 To Display the Employee List  
Press - 3 To Add Employee  
Press - 4 To Delete Employee  
Press - 5 To Update the Database  
Press - 6 To Exit  
*****  
Enter Your Choice: |
```

## Choice 1 : Database Reading



```
StartUp [Java Application] C:\Program Files\Java\jre1.8.0_241\bin\javaw.exe (Mar 14, 2022 10:38:03 AM)
Press - 1 To Read Employee Database
Press - 2 To Display the Employee List
Press - 3 To Add Employee
Press - 4 To Delete Employee
Press - 5 To Update the Database
Press - 6 To Exit
*****
Enter Your Choice: 1
Database has been red Successfully
Do not read again it leads to duplications
*****
Press - 1 To Read Employee Database
Press - 2 To Display the Employee List
Press - 3 To Add Employee
Press - 4 To Delete Employee
Press - 5 To Update the Database
Press - 6 To Exit
*****
Enter Your Choice:
```

## Choice 2: Displaying Records



```
StartUp [Java Application] C:\Program Files\Java\jre1.8.0_241\bin\javaw.exe (Mar 14, 2022 10:43:08 AM)

The UAB Hospital System has the following Employees.

Total Number of Employees : 9

Hospital Employees 1
Name: Lucy      Blazer ID:1995
Doctors 2
Name :John      Blazer ID: 1187 Department :Gastro
Name :Samuel    Blazer ID: 4891 Department :Radiology
Nurses 1
Name :Julia     Blazer ID :1254 Number of Patients : 4
Administrators 2
Name: Jacob     Blazer ID:4123  Department:Business
Name: Catherine Blazer ID:4125  Department:Management
Receptionist 1
Name:Alice      Blazer Id: 4101
Department : Talking    Answering : Y
Janitor 1
Name: David     Blazer Id4789   Department: Maintenance Sweeping : N
Surgeon 1
Name:Steve      Blazer Id: 4345
Department : Brain      Operating : Y
*****
Press - 1 To Read Employee Database
```

## Choice 3 Adding Employees

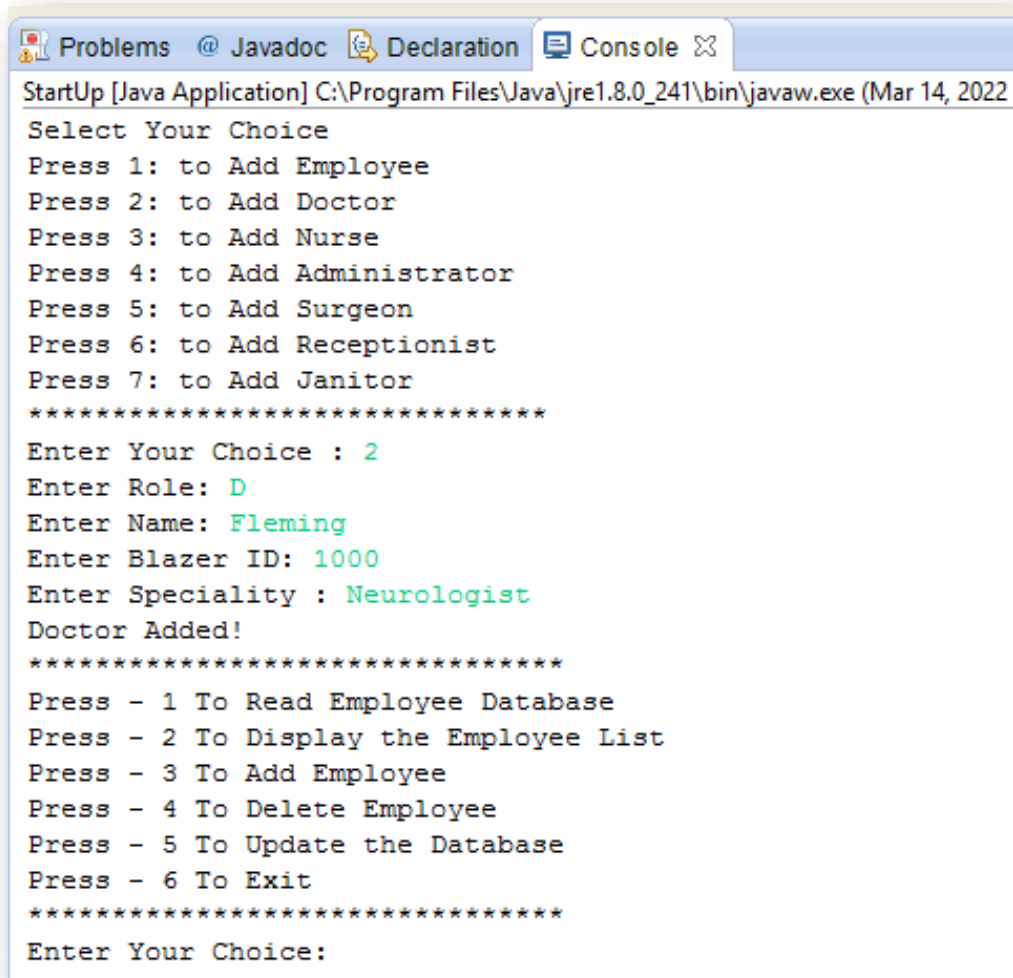
```
*****
Press - 1 To Read Employee Database
Press - 2 To Display the Employee List
Press - 3 To Add Employee
Press - 4 To Delete Employee
Press - 5 To Update the Database
Press - 6 To Exit
*****
Enter Your Choice: 3
*****
Select Your Choice
Press 1: to Add Employee
Press 2: to Add Doctor
Press 3: to Add Nurse
Press 4: to Add Administrator
Press 5: to Add Surgeon
Press 6: to Add Receptionist
Press 7: to Add Janitor
*****
Enter Your Choice : |
```

## Employee Added screen

```
.....
Select Your Choice
Press 1: to Add Employee
Press 2: to Add Doctor
Press 3: to Add Nurse
Press 4: to Add Administrator
Press 5: to Add Surgeon
Press 6: to Add Receptionist
Press 7: to Add Janitor
*****
Enter Your Choice : 1
Enter Role: E
Enter Name: AAA
Enter Blazer ID: 100
Employee Added!
*****
Press - 1 To Read Employee Database
Press - 2 To Display the Employee List
Press - 3 To Add Employee
Press - 4 To Delete Employee
Press - 5 To Update the Database
Press - 6 To Exit
*****
Enter Your Choice:
```



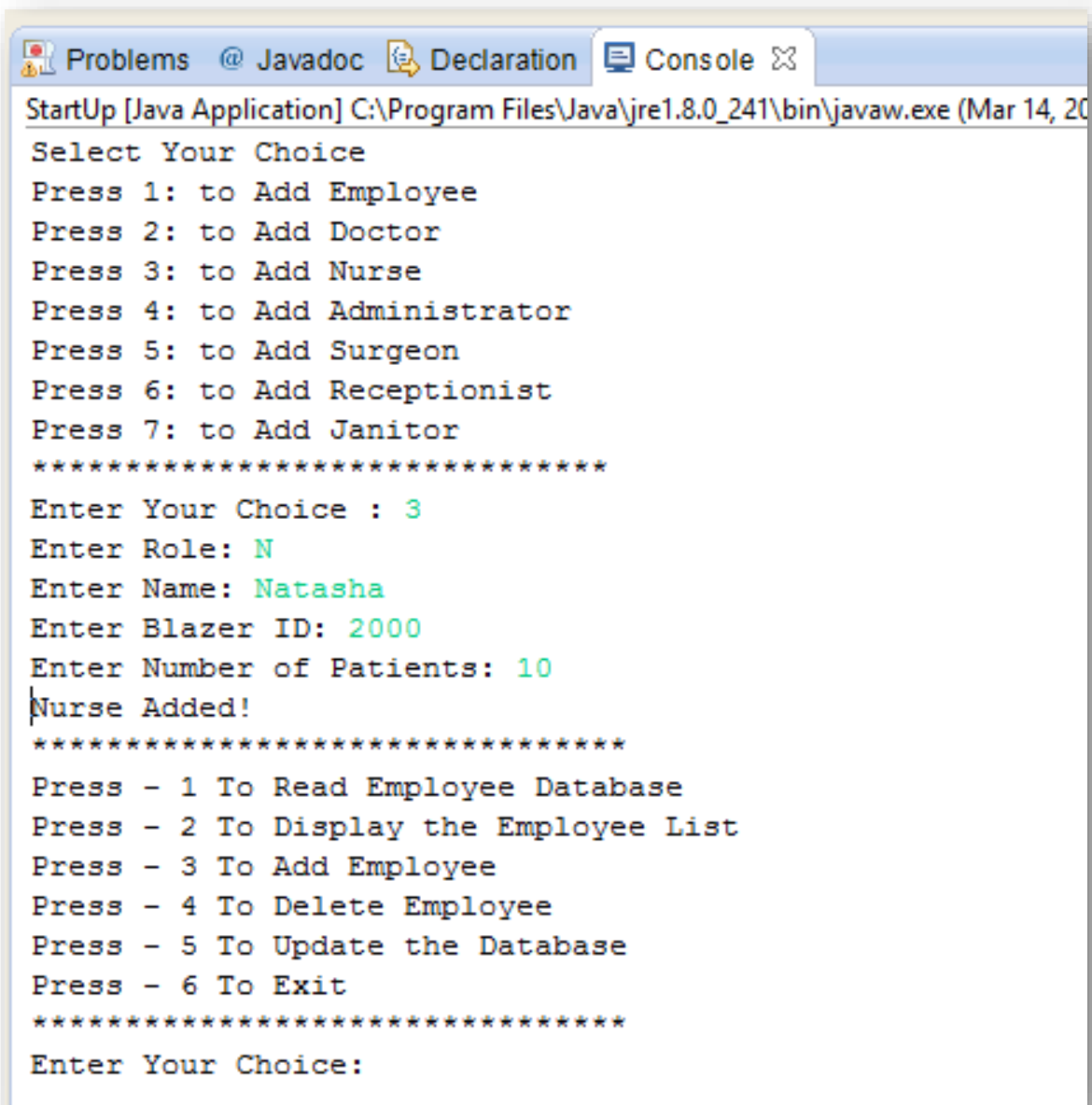
## Doctor Added Screen



The screenshot shows a Java application window titled 'StartUp [Java Application] C:\Program Files\Java\jre1.8.0\_241\bin\javaw.exe (Mar 14, 2022)'. The window has tabs for 'Problems', '@ Javadoc', 'Declaration', and 'Console'. The console output displays a menu for adding different roles, followed by the user selecting '2' for 'Add Doctor'. The user then enters 'D' for role, 'Fleming' for name, '1000' for ID, and 'Neurologist' for speciality. The application confirms 'Doctor Added!' and then shows a new menu with options to read, display, add, delete, update, or exit the database.

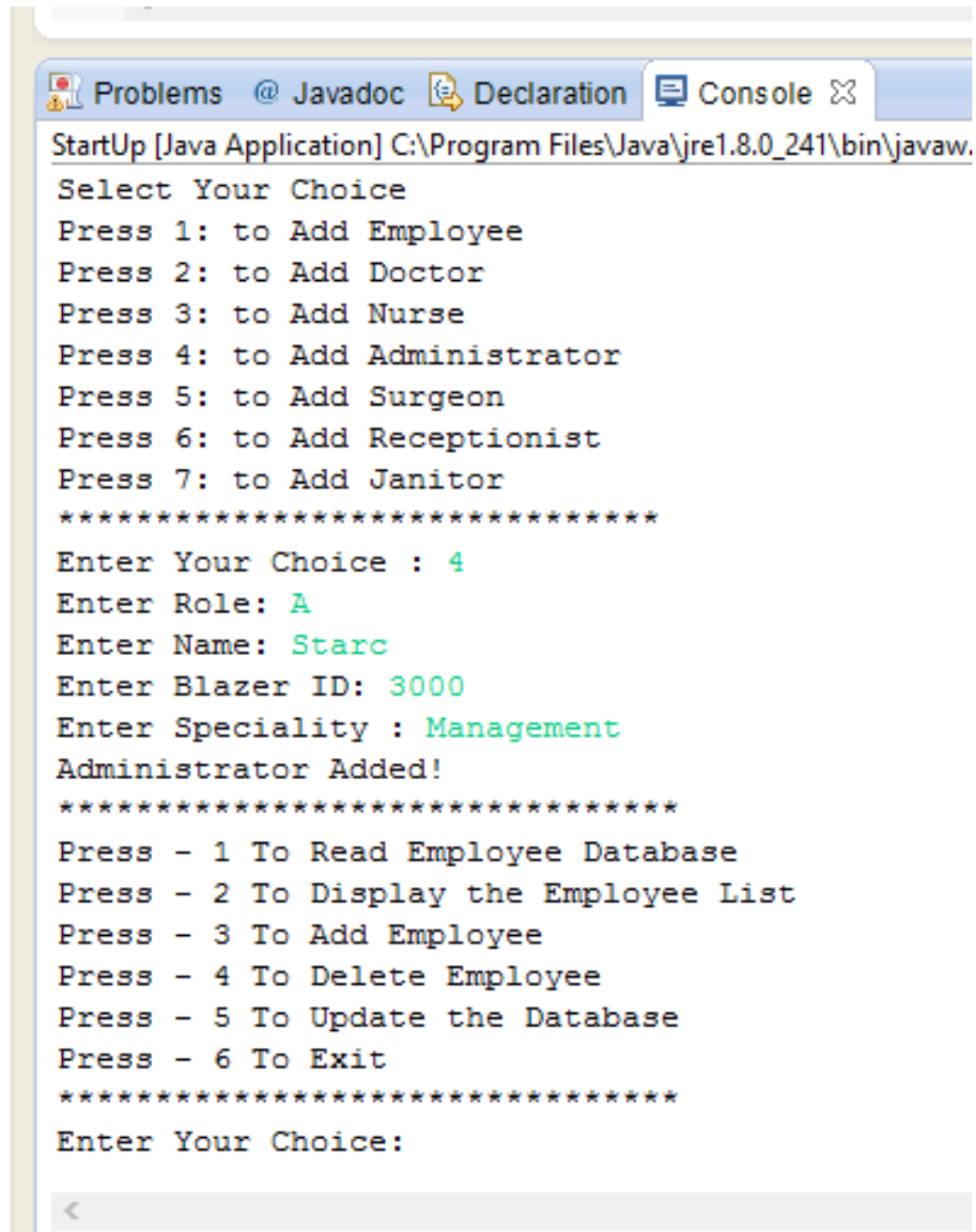
```
Problems @ Javadoc Declaration Console
StartUp [Java Application] C:\Program Files\Java\jre1.8.0_241\bin\javaw.exe (Mar 14, 2022)
Select Your Choice
Press 1: to Add Employee
Press 2: to Add Doctor
Press 3: to Add Nurse
Press 4: to Add Administrator
Press 5: to Add Surgeon
Press 6: to Add Receptionist
Press 7: to Add Janitor
*****
Enter Your Choice : 2
Enter Role: D
Enter Name: Fleming
Enter Blazer ID: 1000
Enter Speciality : Neurologist
Doctor Added!
*****
Press - 1 To Read Employee Database
Press - 2 To Display the Employee List
Press - 3 To Add Employee
Press - 4 To Delete Employee
Press - 5 To Update the Database
Press - 6 To Exit
*****
Enter Your Choice:
```

## Nurse Added



```
Problems  @ Javadoc  Declaration  Console X
StartUp [Java Application] C:\Program Files\Java\jre1.8.0_241\bin\javaw.exe (Mar 14, 20
Select Your Choice
Press 1: to Add Employee
Press 2: to Add Doctor
Press 3: to Add Nurse
Press 4: to Add Administrator
Press 5: to Add Surgeon
Press 6: to Add Receptionist
Press 7: to Add Janitor
*****
Enter Your Choice : 3
Enter Role: N
Enter Name: Natasha
Enter Blazer ID: 2000
Enter Number of Patients: 10
Nurse Added!
*****
Press - 1 To Read Employee Database
Press - 2 To Display the Employee List
Press - 3 To Add Employee
Press - 4 To Delete Employee
Press - 5 To Update the Database
Press - 6 To Exit
*****
Enter Your Choice:
```

## Administrator Added



```
StartUp [Java Application] C:\Program Files\Java\jre1.8.0_241\bin\javaw.  
Select Your Choice  
Press 1: to Add Employee  
Press 2: to Add Doctor  
Press 3: to Add Nurse  
Press 4: to Add Administrator  
Press 5: to Add Surgeon  
Press 6: to Add Receptionist  
Press 7: to Add Janitor  
*****  
Enter Your Choice : 4  
Enter Role: A  
Enter Name: Starc  
Enter Blazer ID: 3000  
Enter Speciality : Management  
Administrator Added!  
*****  
Press - 1 To Read Employee Database  
Press - 2 To Display the Employee List  
Press - 3 To Add Employee  
Press - 4 To Delete Employee  
Press - 5 To Update the Database  
Press - 6 To Exit  
*****  
Enter Your Choice:  
<
```

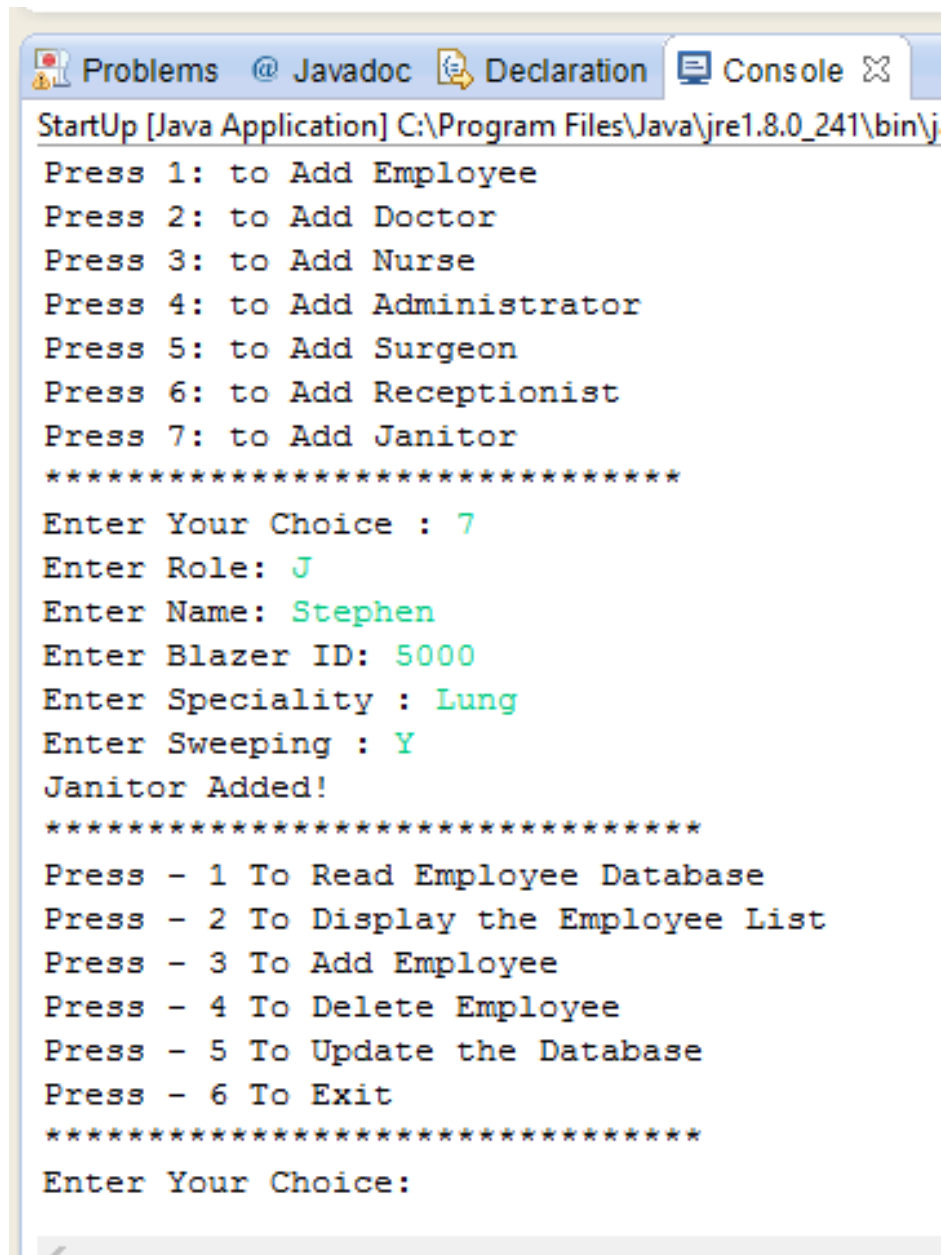
## Surgeon added

```
Problems @ Javadoc Declaration Console X
StartUp [Java Application] C:\Program Files\Java\jre1.8.0_241\bin\javaw.exe
*****
Enter Your Choice: 3
*****
Select Your Choice
Press 1: to Add Employee
Press 2: to Add Doctor
Press 3: to Add Nurse
Press 4: to Add Administrator
Press 5: to Add Surgeon
Press 6: to Add Receptionist
Press 7: to Add Janitor
*****
Enter Your Choice : 5
Enter Role: S
Enter Name: Stuart
Enter Blazer ID: 500
Enter Speciality : Eyes
Enter Operating : Y
Surgeon Added!
*****
Press - 1 To Read Employee Database
Press - 2 To Display the Employee List
Press - 3 To Add Employee
Press - 4 To Delete Employee
Press - 5 To Update the Database
Press - 6 To Exit
*****
Enter Your Choice:
```

## Receptionist Added

```
Problems  @ Javadoc  Declaration  Console  2/5
StartUp [Java Application] C:\Program Files\Java\jre1.8.0_241\bin\javaw.exe (Mar 14
Press 1: to Add Employee
Press 2: to Add Doctor
Press 3: to Add Nurse
Press 4: to Add Administrator
Press 5: to Add Surgeon
Press 6: to Add Receptionist
Press 7: to Add Janitor
*****
Enter Your Choice : 6
Enter Role: R
Enter Name: Jennifer
Enter Blazer ID: 4000
Enter Department : Cardiology
Enter Answering : Y
Receptionist Added!
*****
Press - 1 To Read Employee Database
Press - 2 To Display the Employee List
Press - 3 To Add Employee
Press - 4 To Delete Employee
Press - 5 To Update the Database
Press - 6 To Exit
*****
Enter Your Choice:
```

## Janitor Added



```
StartUp [Java Application] C:\Program Files\Java\jre1.8.0_241\bin\j
Press 1: to Add Employee
Press 2: to Add Doctor
Press 3: to Add Nurse
Press 4: to Add Administrator
Press 5: to Add Surgeon
Press 6: to Add Receptionist
Press 7: to Add Janitor
*****
Enter Your Choice : 7
Enter Role: J
Enter Name: Stephen
Enter Blazer ID: 5000
Enter Speciality : Lung
Enter Sweeping : Y
Janitor Added!
*****
Press - 1 To Read Employee Database
Press - 2 To Display the Employee List
Press - 3 To Add Employee
Press - 4 To Delete Employee
Press - 5 To Update the Database
Press - 6 To Exit
*****
Enter Your Choice:
```

## File View for Proof of added records

uabEmployee.txt	
1	E Lucy 1995
2	D John 1187 Gastro
3	N Julia 1254 4
4	A Jacob 4123 Business
5	A Catherine 4125 Management
6	R Alice 4101 Talking Y
7	J David 4789 Maintenance N
8	D Samuel 4891 Radiology
9	S Steve 4345 Brain Y
10	E AAA 100
11	D Fleming 1000 Neurologist
12	N Natasha 2000 10
13	A Starc 3000 Management
14	S Stuart 500 Eyes Y
15	R Jennifer 4000 Cardiology Y
16	J Stephen 5000 Lung Y

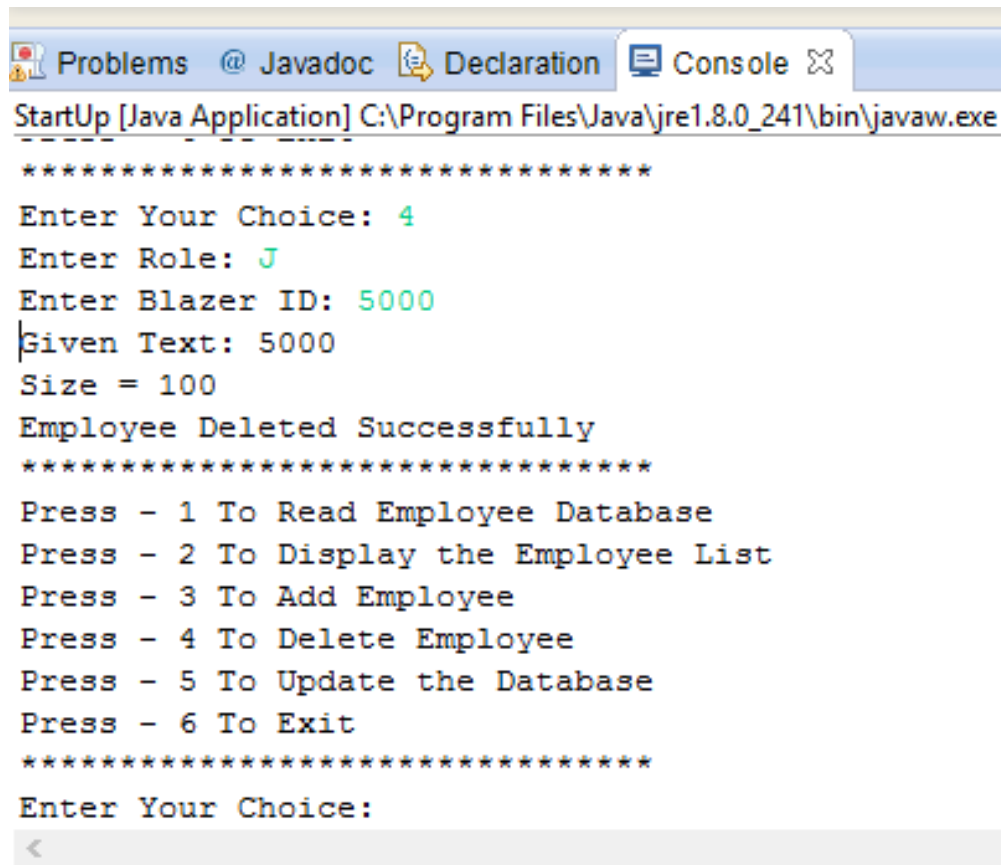
[View all added data now](#)

```
Total Number of Employees : 16

Hospital Employees 2
Name: Lucy      Blazer ID:1995
Name: AAA       Blazer ID:100
Doctors 3
Name :John      Blazer ID: 1187 Department :Gastro
Name :Samuel    Blazer ID: 4891 Department :Radiology
Name :Fleming   Blazer ID: 1000 Department :Neurologist
Nurses 2
Name :Julia     Blazer ID :1254 Number of Patients : 4
Name :Natasha  Blazer ID :2000 Number of Patients : 10
Administrators 3
Name: Jacob     Blazer ID:4123  Department:Business
Name: Catherine Blazer ID:4125  Department:Management
Name: Starc     Blazer ID:3000  Department:Management
Receptionist 2
Name:Alice      Blazer Id: 4101
Department : Talking    Answering : Y
Name:Jennifer   Blazer Id: 4000
Department : Cardiology Answering : Y
Janitor 2
Name: David     Blazer Id4789  Department: Maintenance Sweeping : N
Name: Stephen   Blazer Id5000  Department: Lung          Sweeping : Y
Surgeon 2
Name:Steve      Blazer Id: 4345
Department : Brain    Operating : Y
Name:Stuart     Blazer Id: 500
Department : Eyes     Operating : Y
*****
```

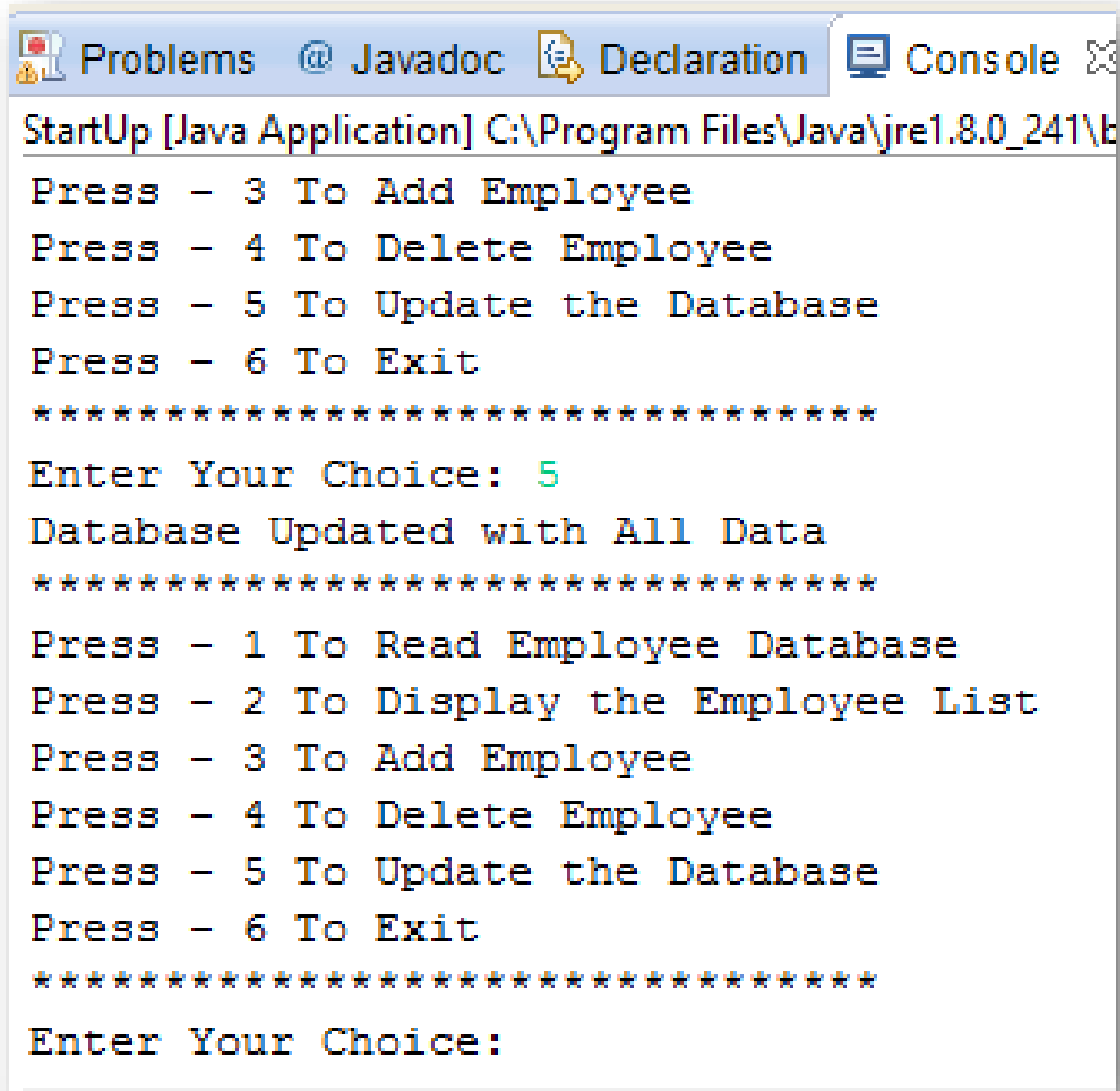


## Delete Janitor



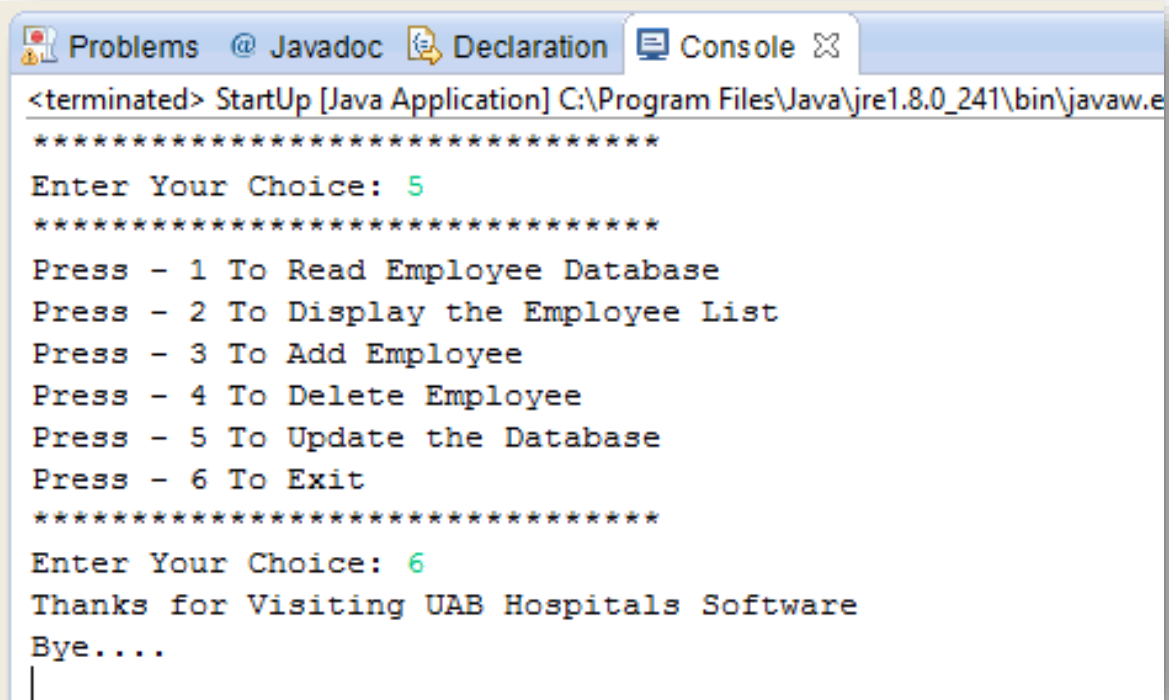
```
StartUp [Java Application] C:\Program Files\Java\jre1.8.0_241\bin\javaw.exe
*****
Enter Your Choice: 4
Enter Role: J
Enter Blazer ID: 5000
Given Text: 5000
Size = 100
Employee Deleted Successfully
*****
Press - 1 To Read Employee Database
Press - 2 To Display the Employee List
Press - 3 To Add Employee
Press - 4 To Delete Employee
Press - 5 To Update the Database
Press - 6 To Exit
*****
Enter Your Choice:
<
```

## Update database



```
StartUp [Java Application] C:\Program Files\Java\jre1.8.0_241\bin
Press - 3 To Add Employee
Press - 4 To Delete Employee
Press - 5 To Update the Database
Press - 6 To Exit
*****
Enter Your Choice: 5
Database Updated with All Data
*****
Press - 1 To Read Employee Database
Press - 2 To Display the Employee List
Press - 3 To Add Employee
Press - 4 To Delete Employee
Press - 5 To Update the Database
Press - 6 To Exit
*****
Enter Your Choice:
```

## Exit from Application



```
<terminated> StartUp [Java Application] C:\Program Files\Java\jre1.8.0_241\bin\javaw.e
*****
Enter Your Choice: 5
*****
Press - 1 To Read Employee Database
Press - 2 To Display the Employee List
Press - 3 To Add Employee
Press - 4 To Delete Employee
Press - 5 To Update the Database
Press - 6 To Exit
*****
Enter Your Choice: 6
Thanks for Visiting UAB Hospitals Software
Bye....
|
```