**public** class User

**{**

**private** int id**;**

**private** string name**;**

**private** string password**;**

**private** int age**;**

**public** string Type**;**

**public** User**()**

**{**

Type **=** "User"**;**

**}**

**public** **override** string ToString**()**

**{**

var output **=** ""**;**

output **+=** "Type: " **+** Type **+** "\n"**;**

output **+=** "ID: " **+** id **+** "\n"**;**

output **+=** "Name: " **+** name **+** "\n"**;**

output **+=** "Password: \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n"**;**

output **+=** "Age: " **+** age **+** "\n"**;**

**return** output**;**

**}**

**public** **virtual** void TakeDetails**()**

**{**

Console**.**WriteLine**(**"Please Enter Your ID:"**);**

id **=** Convert**.**ToInt32**(**Console**.**ReadLine**());**

Console**.**WriteLine**(**"Please Enter Your Name:"**);**

name **=** Console**.**ReadLine**();**

Console**.**WriteLine**(**"Please Enter Your Password:"**);**

password **=** Console**.**ReadLine**();**

Console**.**WriteLine**(**"Please Enter Your Age:"**);**

age **=** Convert**.**ToInt32**(**Console**.**ReadLine**());**

**}**

**}**

**public** class Doctor **:** User

**{**

**private** int experience**;**

**private** string speciality**;**

**public** Doctor**()**

**{**

Type **=** "Doctor"**;**

**}**

**public** **override** string ToString**()**

**{**

var output **=** **base.**ToString**();**

output **+=** "Speciality: " **+** speciality **+** "\n"**;**

output **+=** "Experience: " **+** experience **+** " years\n"**;**

**return** output**;**

**}**

**public** **override** void TakeDetails**()**

**{**

**base.**TakeDetails**();**

Console**.**WriteLine**(**"Please Enter Your Speciality:"**);**

speciality **=** Console**.**ReadLine**();**

Console**.**WriteLine**(**"Please Enter Your Years of Experience:"**);**

experience **=** Convert**.**ToInt32**(**Console**.**ReadLine**());**

**}**

**}**

**public** class Patient **:** User

**{**

**private** string remarks**;**

**private** string status**;**

**public** Patient**()**

**{**

Type **=** "Patient"**;**

**}**

**public** **override** string ToString**()**

**{**

var output **=** **base.**ToString**();**

output **+=** "Remarks: " **+** remarks **+** "\n"**;**

output **+=** "Status: " **+** status **+** "\n"**;**

**return** output**;**

**}**

**public** **override** void TakeDetails**()**

**{**

**base.**TakeDetails**();**

Console**.**WriteLine**(**"Please Enter Your Remarks:"**);**

remarks **=** Console**.**ReadLine**();**

Console**.**WriteLine**(**"Please Enter Your Status:"**);**

status **=** Console**.**ReadLine**();**

**}**

**}**

**public** class ManageUsers

**{**

User**[]** users **=** **new** User**[**2**];**

**public** void RegisterUsers**()**

**{**

Console**.**WriteLine**(**"Registering " **+** users**.**Length **+** " users"**);**

**for** **(**int i **=** 0**;** i **<** users**.**Length**;** i**++)**

**{**

Console**.**WriteLine**(**"Please enter user type: (Patient / Doctor}"**);**

var type **=** Console**.**ReadLine**().**ToLower**();**

**switch** **(**type**)**

**{**

**case** "patient"**:**

users**[**i**]** **=** **new** Patient**();**

**break;**

**case** "doctor"**:**

users**[**i**]** **=** **new** Doctor**();**

**break;**

**default:**

users**[**i**]** **=** **new** Patient**();**

Console**.**WriteLine**(**"Invalid entry. Treating as user type patient"**);**

**break;**

**}**

users**[**i**].**TakeDetails**();**

**}**

**}**

**public** void DisplayUsers**()**

**{**

Console**.**WriteLine**(**"Displaying User Records"**);**

Console**.**WriteLine**(**"--------------------------------"**);**

**for** **(**int i **=** 0**;** i **<** users**.**Length**;** i**++)**

**{**

Console**.**WriteLine**(**users**[**i**]);**

Console**.**WriteLine**(**"--------------------------------"**);**

**}**

**}**

**}**

class Program

**{**

static void Main**(**string**[]** args**)**

**{**

ManageUsers manageUsers **=** **new** ManageUsers**();**

manageUsers**.**RegisterUsers**();**

manageUsers**.**DisplayUsers**();**

Console**.**ReadLine**();**

**}**

**}**

Output:  
