**Both the sets only have different Design class names (Serial/Visit), the rest of the solution is similar.**

**class Serial{**

**String [][] dp = new String[4][4];**

**int i = 0; //pt count**

**String name;**

**public void addSerial(String dept, String doc, String pt){**

**if(i <= dp.length-1){**

**dp[i][0] = dept;**

**dp[i][1] = doc;**

**dp[i][2] = pt;**

**dp[i][3] = "18+";**

**i++;**

**System.out.println("Appointment registered.");**

**}**

**else{**

**System.out.println("Please try tomorrow.");**

**}**

**}**

**public void addSerial(String dept, String doc, String pt, String age){**

**if(i <= dp.length-1){**

**dp[i][0] = dept;**

**dp[i][1] = doc;**

**dp[i][2] = pt;**

**dp[i][3] = age.charAt(0)+" months";**

**i++;**

**System.out.println("Appointment registered.");**

**}**

**else{**

**System.out.println("Please try tomorrow.");**

**}**

**}**

**public String showSerials(String s){**

**String f = "";**

**int serial = 0;**

**System.out.println("\n"+"Patient list for "+s+":");**

**for(int m=0; m<i; m++){**

**if(s.equals(dp[m][1])){**

**serial++;**

**f += serial+". "+dp[m][2]+"\n";**

**}**

**}**

**return f;**

**}**

**public void showSerials(String type, String n){**

**String f = "";**

**int serial = 0;**

**if(type.equals("doctor")){**

**System.out.println("\n"+"Patient list for "+n+":");**

**for(int m=0; m<i; m++){**

**if(n.equals(dp[m][1])){**

**serial++;**

**f += serial+". "+dp[m][2]+"\n";**

**}**

**}**

**}**

**else if(type.equals("dept")){**

**System.out.println("Appointments for "+n+":");**

**for(int m=0; m<i; m++){**

**if(n.equals(dp[m][0])){**

**serial++;**

**f += serial+". "+dp[m][2]+"\n";**

**}**

**}**

**}**

**System.out.println(f);**

**}**

**public void allSerials(){**

**System.out.println("\n"+this.name+" appointments:");**

**for(int m=0; m<i; m++){**

**System.out.println(dp[m][1] +" - "+dp[m][2]);**

**}**

**System.out.println();**

**}**

**}**

**Rubrics to be followed for both the sets:**

| **SL** | **Points to Meet** | **Marks** |
| --- | --- | --- |
| 1 | Java syntaxes (i.e. class, semicolon, curly braces and parentheses) | 1 |
| 2 | Proper class name and instance variable declaration, and necessary array(s) | 2 |
| 3 | addSerial( ) method overloading | 3 |
| 4 | showSerials( ) method overloading | 3 |
| 5 | allSerials( ) method as an instance method | 1 |
| Total | | 10 |