Sadeen Khatib
1212164

```
sadeen@sadeen-VirtualBox:~/Desktop$ ./1212164_Sadeen.sh

-------------Medical Record Management System-------------

------Hello, Choose one:
        1. Add New Record
        2. Delete Record
        3. Retrieve Records by Patient ID
        4. Search for Upormal Tests
        5. Average Test Value
        6. Update an existing test result
        7. Exit
1
Enter Patient ID (7 digits):
1212164
Enter Test Name:
  Choose One:
   Hemoglobin
   Blood
   LDL
   Systolic
   Diastolic
LDL

Enter Test Date (YYYY-MM):
2024-90
  Invalid Date!
Enter Test Date (YYYY-MM):
2024-08

Enter Result:
90

Enter Status (Pending, Completed, Reviewed):
Pending
  --Record added successfully!

-------------Medical Record Management System-------------

------Hello, Choose one:
```

```
-------------Medical Record Management System-------------

------Hello, Choose one:
        1. Add New Record
        2. Delete Record
        3. Retrieve Records by Patient ID
        4. Search for Upormal Tests
        5. Average Test Value
        6. Update an existing test result
        7. Exit
3
Enter Patient ID:
1212164

   1. Retrieve all tests
   2. Retrieve all up normal tests
   3. Retrieve tests in a specific period (YYYY-MM)
   4. Retrieve tests based on status
Choose an option:
1
1212164: Hemoglobin, 2024-08, 39, Reviewed
1212164: LDL, 2024-08, 300, Reviewed
1212164: Hemoglobin, 2024-08, 14, Reviewed
1212164: LDL, 2024-08, 90, Reviewed
1212164: LDL, 2024-08, 90, mg/dL, Pending

-------------Medical Record Management System-------------

------Hello, Choose one:
        1. Add New Record
        2. Delete Record
        3. Retrieve Records by Patient ID
        4. Search for Upormal Tests
        5. Average Test Value
        6. Update an existing test result
        7. Exit
3
Enter Patient ID:
1212164
```

```
sadeen@sadeen-VirtualBox:~/Desktop$ ./1212164_Sadeen.sh

-------------Medical Record Management System-------------

------Hello, Choose one:
        1. Add New Record
        2. Delete Record
        3. Retrieve Records by Patient ID
        4. Search for Upormal Tests
        5. Average Test Value
        6. Update an existing test result
        7. Exit
3
Enter Patient ID:
1212163
Patient Id '1212163' Not found.
sadeen@sadeen-VirtualBox:~/Desktop$ ./1212164_Sadeen.sh

-------------Medical Record Management System-------------

------Hello, Choose one:
        1. Add New Record
        2. Delete Record
        3. Retrieve Records by Patient ID
        4. Search for Upormal Tests
        5. Average Test Value
        6. Update an existing test result
        7. Exit
3
Enter Patient ID:
1212164

    1. Retrieve all tests
    2. Retrieve all up normal tests
    3. Retrieve tests in a specific period (YYYY-MM)
    4. Retrieve tests based on status
Choose an option:
1
1212164: Hemoglobin, 2024-06, 20, Reviewed
1212164: Blood, 2024-08, 100, mg/dL, Pending
```

```
------Hello, Choose one:
        1. Add New Record
        2. Delete Record
        3. Retrieve Records by Patient ID
        4. Search for Upormal Tests
        5. Average Test Value
        6. Update an existing test result
        7. Exit
3
Enter Patient ID:
1212164

    1. Retrieve all tests
    2. Retrieve all up normal tests
    3. Retrieve tests in a specific period (YYYY-MM)
    4. Retrieve tests based on status
Choose an option:
1
1212164: Hemoglobin, 2024-06, 20, Reviewed
1212164: Blood, 2024-08, 100, mg/dL, Pending
1212164: LDL, 2024-04, 120, mg/dL, Completed
1212164: LDL, 2024-08, 90, mg/dL, Pending

-------------Medical Record Management System-------------

------Hello, Choose one:
        1. Add New Record
        2. Delete Record
        3. Retrieve Records by Patient ID
        4. Search for Upormal Tests
        5. Average Test Value
        6. Update an existing test result
        7. Exit
3
Enter Patient ID:
1212164

    1. Retrieve all tests
    2. Retrieve all up normal tests
    3. Retrieve tests in a specific period (YYYY-MM)
```

```
          3. Retrieve Records by Patient ID
          4. Search for Upormal Tests
          5. Average Test Value
          6. Update an existing test result
          7. Exit
3
Enter Patient ID:
1212164

    1. Retrieve all tests
    2. Retrieve all up normal tests
    3. Retrieve tests in a specific period (YYYY-MM)
    4. Retrieve tests based on status
Choose an option:
2
1212164: Hemoglobin, 2024-06, 20, Reviewed,
1212164: Blood, 2024-08, 100, mg/dL, Pending
1212164: LDL, 2024-04, 120, mg/dL, Completed

--------------Medical Record Management System--------------

------Hello, Choose one:
          1. Add New Record
          2. Delete Record
          3. Retrieve Records by Patient ID
          4. Search for Upormal Tests
          5. Average Test Value
          6. Update an existing test result
          7. Exit
3
Enter Patient ID:
1212164

    1. Retrieve all tests
    2. Retrieve all up normal tests
    3. Retrieve tests in a specific period (YYYY-MM)
    4. Retrieve tests based on status
Choose an option:
3
  Enter Start date (YYYY-MM):
```

```
          3. Retrieve Records by Patient ID
          4. Search for Upormal Tests
          5. Average Test Value
          6. Update an existing test result
          7. Exit
3
Enter Patient ID:
1212164

    1. Retrieve all tests
    2. Retrieve all up normal tests
    3. Retrieve tests in a specific period (YYYY-MM)
    4. Retrieve tests based on status
Choose an option:
3
  Enter Start date (YYYY-MM):
2024-09
  Enter End date (YYYY-MM):
2024-01
End date must be after Start date. Please re-enter the dates.
  Enter Start date (YYYY-MM):
2024-07
  Enter End date (YYYY-MM):
2024-09
1212164: Blood, 2024-08, 100 mg/dL, Pending
1212164: LDL, 2024-08, 90 mg/dL, Pending

--------------Medical Record Management System--------------

------Hello, Choose one:
          1. Add New Record
          2. Delete Record
          3. Retrieve Records by Patient ID
          4. Search for Upormal Tests
          5. Average Test Value
          6. Update an existing test result
          7. Exit
3
Enter Patient ID:
1212164
```

```
                        7. Exit
3
Enter Patient ID:
1212164

    1. Retrieve all tests
    2. Retrieve all up normal tests
    3. Retrieve tests in a specific period (YYYY-MM)
    4. Retrieve tests based on status
Choose an option:
4
Enter status to search (Pending, Completed, Reviewed):
Pending
1212164: Blood, 2024-08, 100, mg/dL, Pending
1212164: LDL, 2024-08, 90, mg/dL, Pending

--------------Medical Record Management System--------------

------Hello, Choose one:
        1. Add New Record
        2. Delete Record
        3. Retrieve Records by Patient ID
        4. Search for Upormal Tests
        5. Average Test Value
        6. Update an existing test result
        7. Exit
3
Enter Patient ID:
1212164

    1. Retrieve all tests
    2. Retrieve all up normal tests
    3. Retrieve tests in a specific period (YYYY-MM)
    4. Retrieve tests based on status
Choose an option:
4
Enter status to search (Pending, Completed, Reviewed):
Completed
1212164: LDL, 2024-04, 120, mg/dL, Completed
```

```
sadeen@sadeen-VirtualBox:~/Desktop$ ./1212164_Sadeen.sh

--------------Medical Record Management System--------------

------Hello, Choose one:
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        4. Search for Upormal Tests
        5. Average Test Value
        6. Update an existing test result
        7. Exit
5

 Average for Blood: 72.80 mg/dL

 Average for Diastolic: 84.00 mm Hg

 Average for Systolic: 48.00 mm Hg

 Average for Hemoglobin: 7.40 g/dL

--------------Medical Record Management System--------------

------Hello, Choose one:
        1. Add New Record
        2. Delete Record
        3. Retrieve Records by Patient ID
        4. Search for Upormal Tests
        5. Average Test Value
        6. Update an existing test result
        7. Exit
6
All records in the system:
1300511: Blood, 2024-03, 14, mg/dL, pending
1220187: Systolic, 2022-08, 130, mm Hg, completed
1220187: Blood, 2024-03, 100, mg/dL, pending
1220187: Systolic, 2018-08, 110, mm Hg, pending
1220187: Diastolic, 2020-01, 320, mm Hg, Reviewed
1220187: Blood, 2020-07, 80, mg/dL, pending
```

```
------Hello, Choose one:
        1. Add New Record
        2. Delete Record
        3. Retrieve Records by Patient ID
        4. Search for Uormal Tests
        5. Average Test Value
        6. Update an existing test result
        7. Exit
6
All records in the system:
1300511: Blood, 2024-03, 14, mg/dL, pending
1220187: Systolic, 2022-08, 130, mm Hg, completed
1220187: Blood, 2024-03, 100, mg/dL, pending
1220187: Systolic, 2018-08, 110, mm Hg, pending
1220187: Diastolic, 2020-01, 320, mm Hg, Reviewed
1220187: Blood, 2020-07, 80, mg/dL, pending
1220187: Blood, 2020-07, 70, mg/dL, pending
1212164: Hemoglobin, 2024-06, 20, Reviewed
1231164: Diastolic, 2024-07, 100, mm Hg, pending
1220187: Hemoglobin, 2024-08, 17, g/dL, completed
1212164: Blood, 2024-08, 100, mg/dL, Pending

Enter Patient ID:
1212164
Enter Test Name:
  Choose One:
   Hemoglobin
   Blood
   LDL
   Systolic
   Diastolic
Blood
Enter Test Date (format: YYYY-MM):
2024-08

Enter New Result:
90
 --Test result updated successfully!

--------------Medical Record Management System--------------
```

```
Enter Patient ID:
1212164
Enter Test Name:
  Choose One:
   Hemoglobin
   Blood
   LDL
   Systolic
   Diastolic
Blood
Enter Test Date (format: YYYY-MM):
2024-08

Enter New Result:
90
 --Test result updated successfully!

--------------Medical Record Management System--------------

------Hello, Choose one:
        1. Add New Record
        2. Delete Record
        3. Retrieve Records by Patient ID
        4. Search for Uormal Tests
        5. Average Test Value
        6. Update an existing test result
        7. Exit
3
Enter Patient ID:
1212164

   1. Retrieve all tests
   2. Retrieve all up normal tests
   3. Retrieve tests in a specific period (YYYY-MM)
   4. Retrieve tests based on status
Choose an option:
1
1212164: Hemoglobin, 2024-06, 20, Reviewed
1212164: Blood, 2024-08, 90, mg/dL, Pending
```

```
--------------Medical Record Management System--------------

------Hello, Choose one:
        1. Add New Record
        2. Delete Record
        3. Retrieve Records by Patient ID
        4. Search for Upormal Tests
        5. Average Test Value
        6. Update an existing test result
        7. Exit
2
-----------------Recent Records-----------------
1300511: Blood, 2024-03, 14, mg/dL, pending
1220187: Systolic, 2022-08, 130, mm Hg, completed
1220187: Blood, 2024-03, 100, mg/dL, pending
1220187: Systolic, 2018-08, 110, mm Hg, pending
1220187: Diastolic, 2020-01, 320, mm Hg, Reviewed
1220187: Blood, 2020-07, 80, mg/dL, pending
1220187: Blood, 2020-07, 70, mg/dL, pending
1212164: Hemoglobin, 2024-06, 20, Reviewed
1231164: Diastolic, 2024-07, 100, mm Hg, pending
1220187: Hemoglobin, 2024-08, 17, g/dL, completed
1212164: Blood, 2024-08, 90, mg/dL, Pending

Enter Patient ID:
1212164

Enter Test Name:
   Hemoglobin
   Blood
   LDL
   Systolic
   Diastolic
Blood

Enter Test Date (YYYY-MM):
2024-08
 --Record deleted successfully

--------------Medical Record Management System--------------
```

```
Enter Patient ID:
1212164

Enter Test Name:
    Hemoglobin
    Blood
    LDL
    Systolic
    Diastolic
Blood

Enter Test Date (YYYY-MM):
2024-08
 --Record deleted successfully

--------------Medical Record Management System--------------

------Hello, Choose one:
        1. Add New Record
        2. Delete Record
        3. Retrieve Records by Patient ID
        4. Search for Upormal Tests
        5. Average Test Value
        6. Update an existing test result
        7. Exit
2
-----------------Recent Records-----------------
1300511: Blood, 2024-03, 14, mg/dL, pending
1220187: Systolic, 2022-08, 130, mm Hg, completed
1220187: Blood, 2024-03, 100, mg/dL, pending
1220187: Systolic, 2018-08, 110, mm Hg, pending
1220187: Diastolic, 2020-01, 320, mm Hg, Reviewed
1220187: Blood, 2020-07, 80, mg/dL, pending
1220187: Blood, 2020-07, 70, mg/dL, pending
1212164: Hemoglobin, 2024-06, 20, Reviewed
1231164: Diastolic, 2024-07, 100, mm Hg, pending
1220187: Hemoglobin, 2024-08, 17, g/dL, completed

Enter Patient ID:
```