



Faculty of Engineering and Technology
Electrical and Computer Engineering Department

ENCS313

Report

python Project

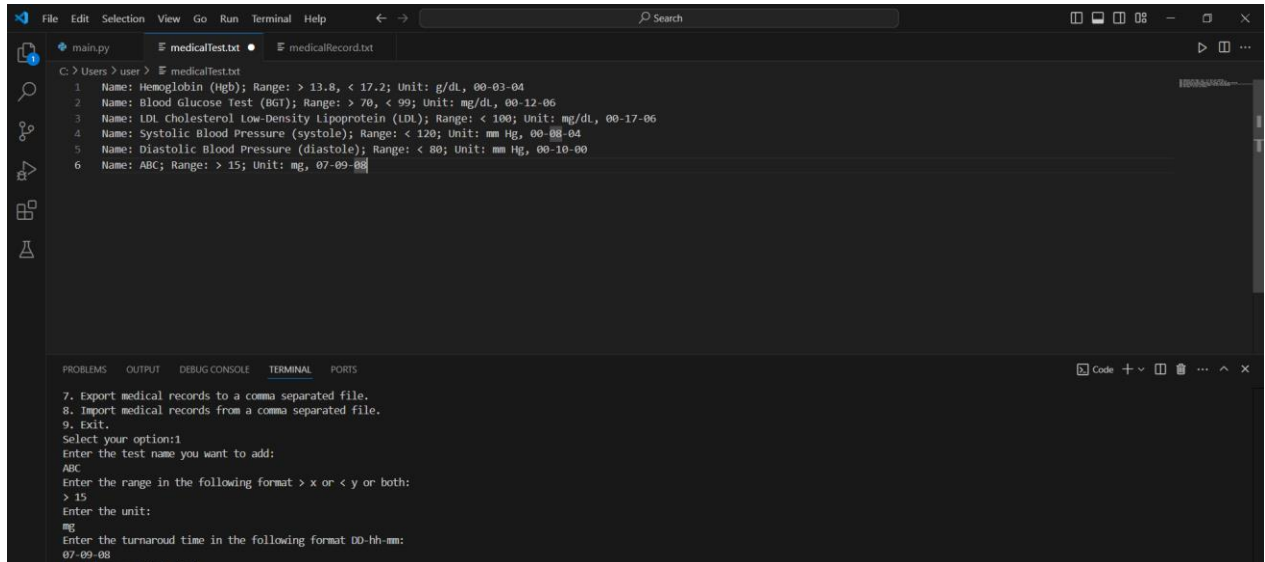
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Date: 23/08/2024

Some Test Cases:

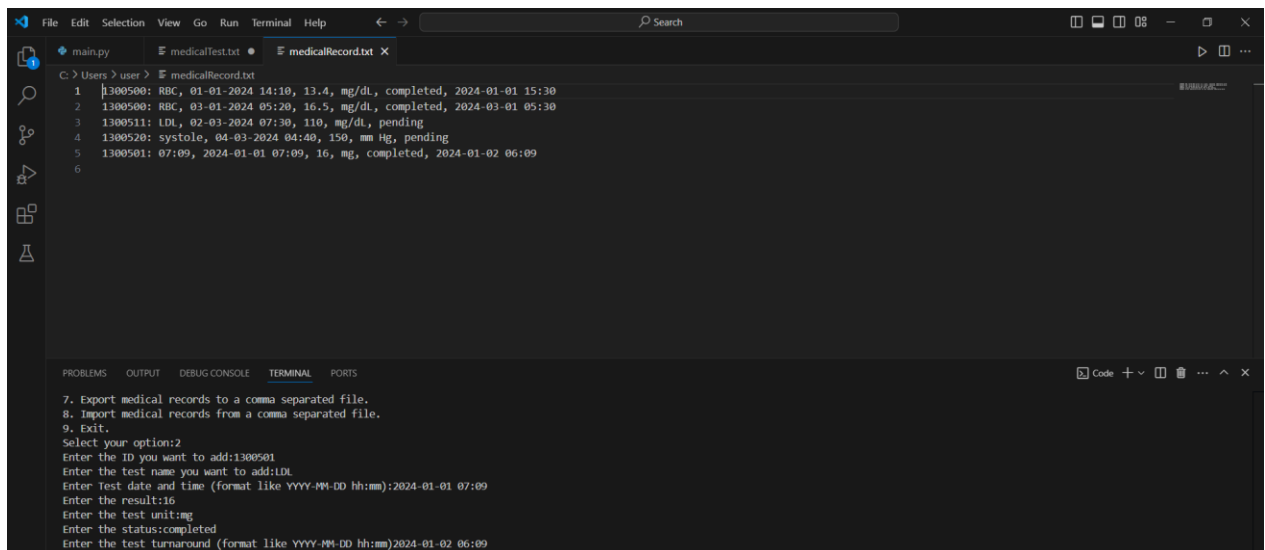


The screenshot shows a code editor with two tabs: `main.py` and `medicalTest.txt`. The `medicalTest.txt` tab is active, displaying a list of medical tests. The terminal window at the bottom shows the program's execution flow, including prompts for adding a new test.

```
1 Name: Hemoglobin (Hgb); Range: > 13.8, < 17.2; Unit: g/dL, 00-03-04
2 Name: Blood Glucose Test (BGT); Range: > 70, < 99; Unit: mg/dL, 00-12-06
3 Name: LDL Cholesterol Low-Density Lipoprotein (LDL); Range: < 100; Unit: mg/dL, 00-17-06
4 Name: Systolic Blood Pressure (systole); Range: < 120; Unit: mm Hg, 00-08-04
5 Name: Diastolic Blood Pressure (diastole); Range: < 80; Unit: mm Hg, 00-10-00
6 Name: ABC; Range: > 15; Unit: mg, 07-09-08
```

```
7. Export medical records to a comma separated file.
8. Import medical records from a comma separated file.
9. Exit.
Select your option:1
Enter the test name you want to add:
ABC
Enter the range in the following format > x or < y or both:
> 15
Enter the unit:
mg
Enter the turnaround time in the following format DD-hh-mm:
07-09-08
```

As shown above, the medical test was successfully added to the file.

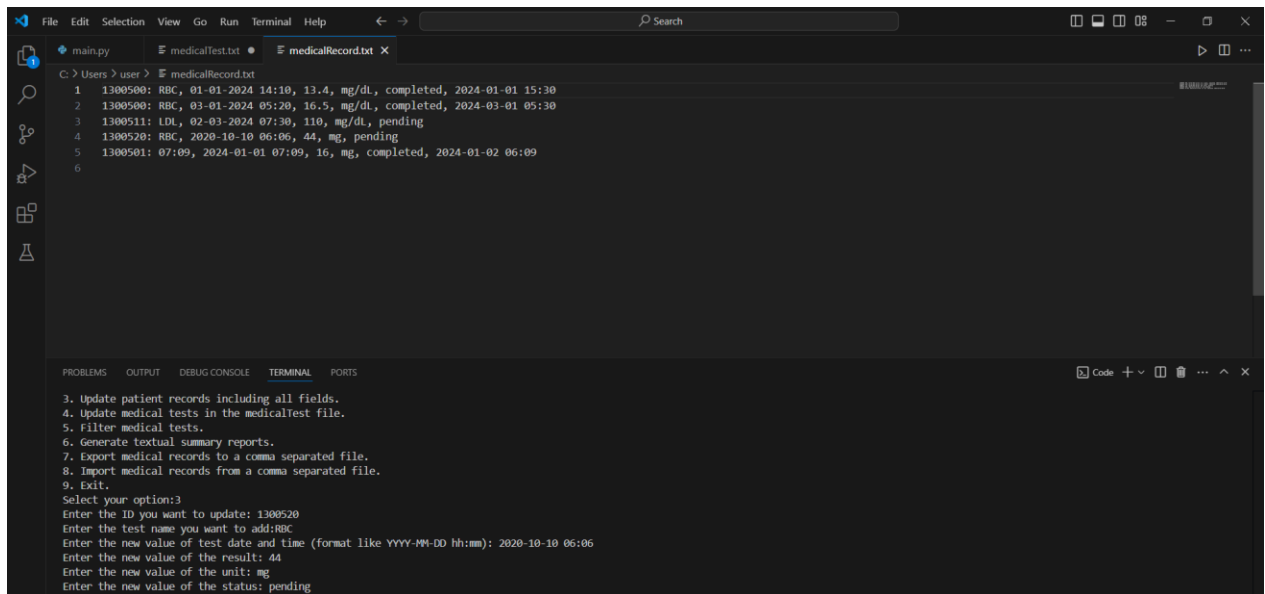


The screenshot shows the same code editor with the `medicalRecord.txt` tab active. The terminal window shows the program's execution flow, including prompts for adding a new record.

```
1 1300500: RBC, 01-01-2024 14:10, 13.4, mg/dL, completed, 2024-01-01 15:30
2 1300500: RBC, 03-01-2024 05:20, 16.5, mg/dL, completed, 2024-03-01 05:30
3 1300511: LDL, 02-03-2024 07:30, 110, mg/dL, pending
4 1300520: systole, 04-03-2024 04:40, 150, mm Hg, pending
5 1300501: 07:09, 2024-01-01 07:09, 16, mg, completed, 2024-01-02 06:09
6
```

```
7. Export medical records to a comma separated file.
8. Import medical records from a comma separated file.
9. Exit.
Select your option:2
Enter the ID you want to add:1300501
Enter the test name you want to add:LDL
Enter test date and time (format like YYYY-MM-DD hh:mm):2024-01-01 07:09
Enter the result:16
Enter the test unit:mg
Enter the status:completed
Enter the test turnaround (format like YYYY-MM-DD hh:mm)2024-01-02 06:09
```

As shown above, the medical record was successfully added to the file.



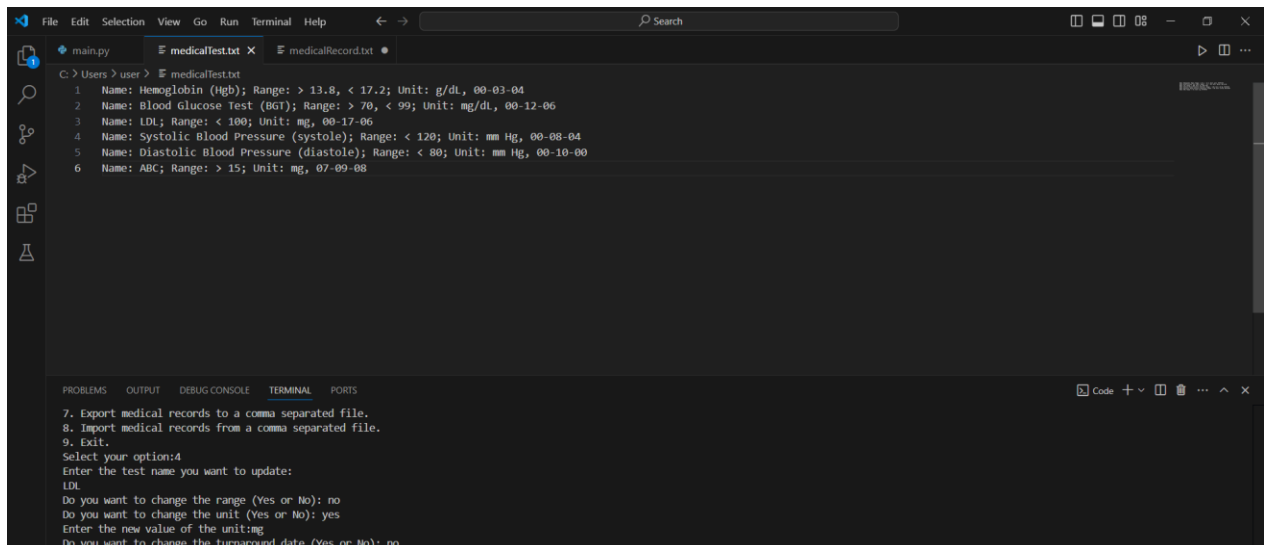
The screenshot shows a VS Code editor with two tabs: `main.py` and `medicalRecord.txt`. The `medicalRecord.txt` tab is active and contains the following text:

```
C:\Users\user> medicalRecord.txt
1 1300500: RBC, 01-01-2024 14:10, 13.4, mg/dL, completed, 2024-01-01 15:30
2 1300500: RBC, 03-01-2024 05:20, 16.5, mg/dL, completed, 2024-03-01 05:30
3 1300511: LDL, 02-03-2024 07:30, 110, mg/dL, pending
4 1300520: RBC, 2020-10-10 06:06, 44, mg, pending
5 1300501: 07:09, 2024-01-01 07:09, 16, mg, completed, 2024-01-02 06:09
6
```

The terminal window at the bottom shows the following output:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
3. Update patient records including all fields.
4. Update medical tests in the medicalTest file.
5. Filter medical tests.
6. Generate textual summary reports.
7. Export medical records to a comma separated file.
8. Import medical records from a comma separated file.
9. Exit.
Select your option:3
Enter the ID you want to update: 1300520
Enter the test name you want to add:RBC
Enter the new value of test date and time (format like YYYY-MM-DD hh:mm): 2020-10-10 06:06
Enter the new value of the result: 44
Enter the new value of the unit: mg
Enter the new value of the status: pending
```

As shown above, the medical record was successfully updated in the file including all fields.



The screenshot shows a VS Code editor with two tabs: `main.py` and `medicalTest.txt`. The `medicalTest.txt` tab is active and contains the following text:

```
C:\Users\user> medicalTest.txt
1 Name: Hemoglobin (Hgb); Range: > 13.8, < 17.2; Unit: g/dL, 00-03-04
2 Name: Blood Glucose Test (BGT); Range: > 70, < 99; Unit: mg/dL, 00-12-06
3 Name: LDL; Range: < 100; Unit: mg, 00-17-06
4 Name: Systolic Blood Pressure (systole); Range: < 120; Unit: mm Hg, 00-08-04
5 Name: Diastolic Blood Pressure (diastole); Range: < 80; Unit: mm Hg, 00-10-00
6 Name: ABC; Range: > 15; Unit: mg, 07-09-08
```

The terminal window at the bottom shows the following output:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
7. Export medical records to a comma separated file.
8. Import medical records from a comma separated file.
9. Exit.
Select your option:4
Enter the test name you want to update:
LDL
Do you want to change the range (Yes or No): no
Do you want to change the unit (Yes or No): yes
Enter the new value of the unit:mg
Do you want to change the turnaround date (Yes or No): no
```

As shown above, the medical test was successfully updated in the file.

```
Select your option:5
Enter Yes for the criteria you want to filter and No for other:
do you want to retrieve the id: yes
Enter the id:1300500
do you want to retrieve the test Name: no
do you want to retrieve the Abnormal tests: no
do you want to retrieve test within a specific period: no
do you want to retrieve the status:no
do you want to retrieve the turnaround:yes
1300500: RBC, 1-1-2024 14:10, 13.4, mg/dL, completed, 1-1-2024 15:30
1300500: RBC, 3-1-2024 5:20, 13.5, mg/dL, pending, 1-1-2024 15:30
1. Add new medical test
```

As shown above, the medical tests were filtered successfully based on the user's input.

```
9. EXIT.
Select your option:6
Max value for the filtered tests is: 13.5
Min value for the filtered tests is: 13.4
The average for test RBC is 13.45
Max turnarounds for the filtered tests is: 10:10
Min turnarounds for the filtered tests is: 1:20
The average for turnaround test RBC is 20700.0 seconds
```

The textual summary report for the previous filtered tests was also generated successfully.

	G	F	E	D	C	B	A	
	Results Date	Status	Unit	Result	Test Date and Time	Test Name ID		1
	1/1/2024 15:30	completed	mg/dL	13.4	1/1/2024 14:10	RBC	1300500	2
	1/1/2024 15:30	pending	mg/dL	13.5	3/1/2024 5:20	RBC	1300500	3
		pending	mg/dL	110	3/2/2024 7:30	LDL	1300511	4
		pending	h	23	9/8/2024 11:04	systole	1300520	5
								6

In case 7 the file was successfully imported into a csv file.

H	G	F	E	D	C	B	A	
	Results Date	Status	Unit	Result	Test Date and Time	Test Name ID		1
	1/1/2024 15:30	completed	mg/dL	13.4	1/1/2024 14:10	RBC	1300500	2
	1/1/2024 15:30	completed	mg/dL	13.5	3/1/2024 5:20	RBC	1300500	3
		pending	mg/dL	110	3/2/2024 7:30	LDL	1300511	4
		pending	h	23	9/8/2024 11:04	systole	1300520	5
		pending	mm	90	9/4/2024 11:30	LDL	1300555	6

For case 8 we added a new medical record to be exported into the file

```

1300500, RBC, 1/1/2024 14:10, 13.4, mg/dL, completed, 1/1/2024 15:30
1300500, RBC, 3/1/2024 5:20, 13.5, mg/dL, completed, 1/1/2024 15:30
1300511, LDL, 3/2/2024 7:30, 110, mg/dL, pending,
1300520, systole, 9/8/2024 11:04, 23, h, pending,
1300555, LDL, 9/4/2024 11:30, 90, mm, pending,

```

Which as shown, it was successfully added.