



**Faculty of Engineering & Technology**

**Electrical & Computer Engineering Department**

**COMPUTER ARCHITECTURE: ENCS4370**

**Project1: Test Cases**

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**Prepared by:**

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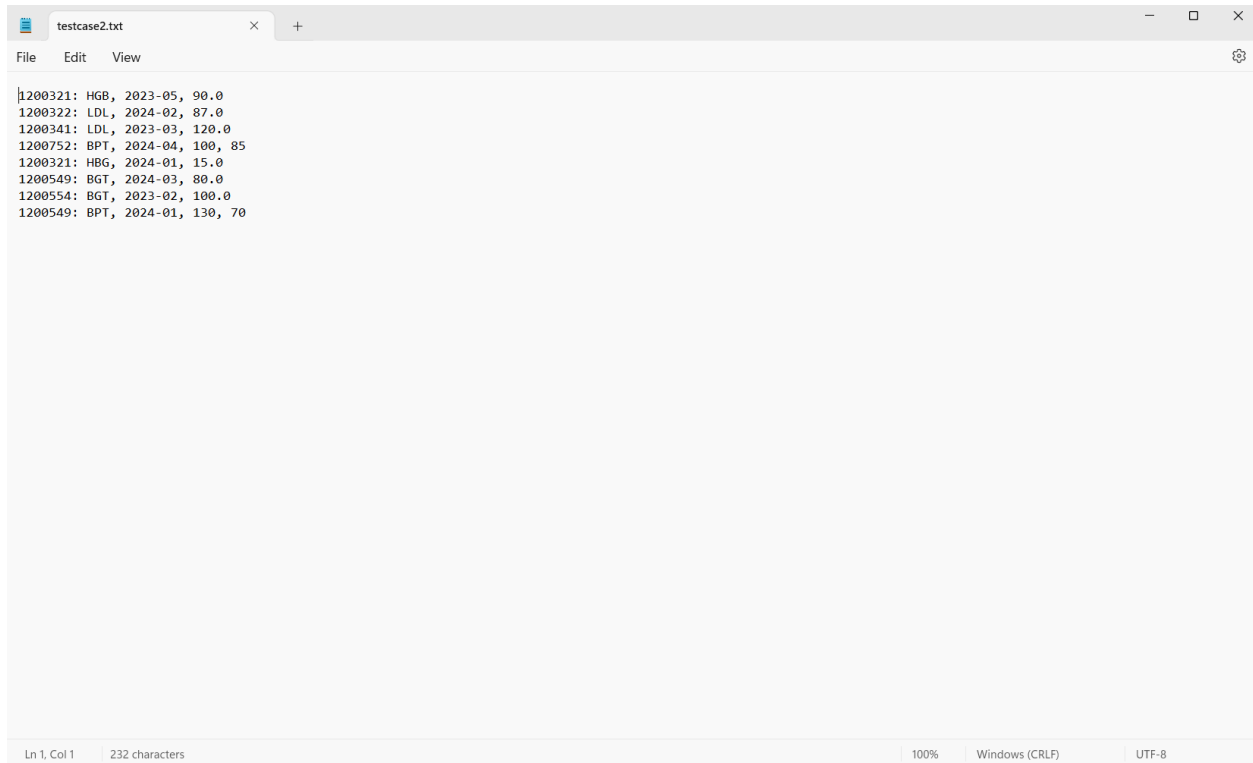
**Instructor: Dr. Ayman Hroub**

**Section: 2**

**Date: 30-4-2024**

**Birzeit**

We have this file, we want to make some test cases:

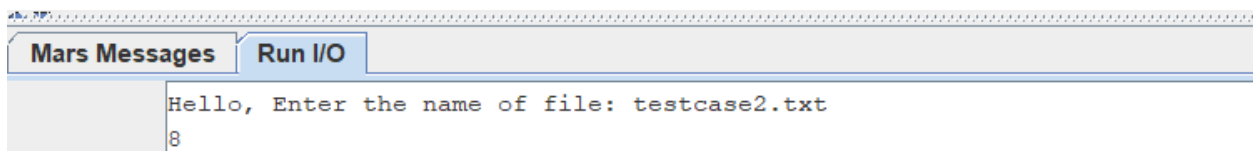


The screenshot shows a text editor window with the title 'testcase2.txt'. The menu bar includes 'File', 'Edit', and 'View'. The text content is as follows:

```
1200321: HGB, 2023-05, 90.0  
1200322: LDL, 2024-02, 87.0  
1200341: LDL, 2023-03, 120.0  
1200752: BPT, 2024-04, 100, 85  
1200321: HBG, 2024-01, 15.0  
1200549: BGT, 2024-03, 80.0  
1200554: BGT, 2023-02, 100.0  
1200549: BPT, 2024-01, 130, 70
```

The status bar at the bottom indicates 'Ln 1, Col 1', '232 characters', '100%', 'Windows (CRLF)', and 'UTF-8'.

We enter the name of the file and it print the number of tests inside it



The screenshot shows a terminal window with a title bar containing 'Mars Messages' and 'Run I/O'. The terminal output is:

```
Hello, Enter the name of file: testcase2.txt  
8
```

There is 8 tests in the file.

We print the menu:

Mars Messages	Run I/O
<div>Clear</div>	Choose an option: ----- 1. Add a new medical test 2. Search for a test by patient ID 3. Search for unnormal patient tests 4. Average test value 5. Update an existing test result 6. Delete a test 7. Exit

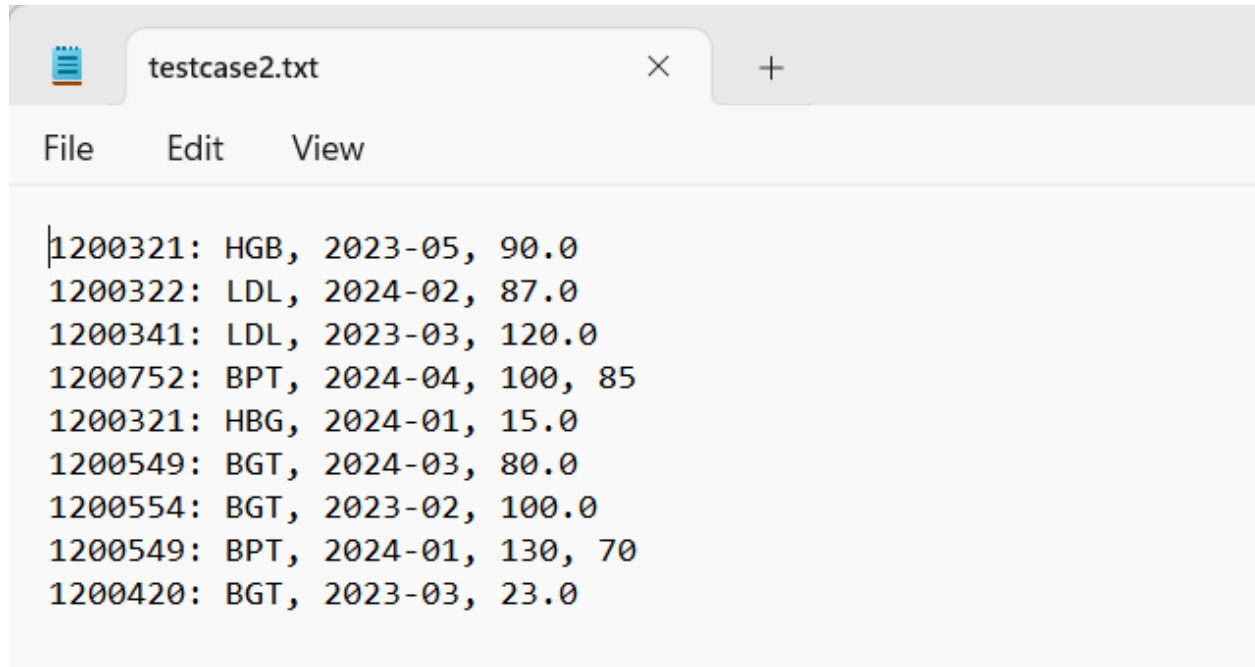
## 1. A new medical test:

Mars Messages	Run I/O
<div>Clear</div>	Enter an Option: 1  Enter Patient ID (7 digits): 1200420  Enter Test Name (HGB, BGT, LDL, BPT): BGT  Enter Test Date (YYYY-MM): 2023-03  Enter The Result for BGT Test: 23.0

Mars Messages	Run I/O
<div>Clear</div>	1200321: HGB, 2023-05, 90.0 1200322: LDL, 2024-02, 87.0 1200341: LDL, 2023-03, 120.0 1200752: BPT, 2024-04, 100, 85 1200321: HGB, 2024-01, 15.0 1200549: BGT, 2024-03, 80.0 1200554: BGT, 2023-02, 100.0 1200549: BPT, 2024-01, 130, 70 1200420: BGT, 2023-03, 23.0

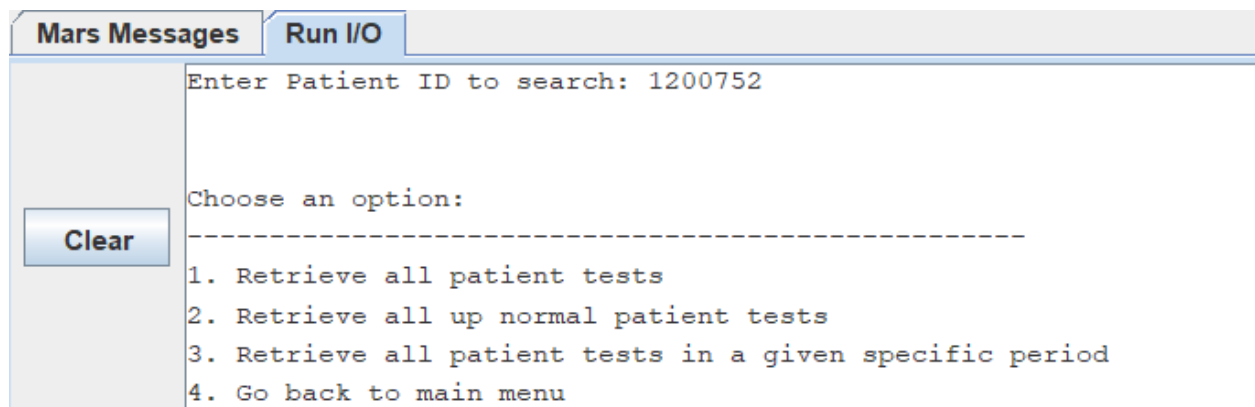
Added successfully in the last.

Also, it was added to the file:



```
1200321: HGB, 2023-05, 90.0
1200322: LDL, 2024-02, 87.0
1200341: LDL, 2023-03, 120.0
1200752: BPT, 2024-04, 100, 85
1200321: HBG, 2024-01, 15.0
1200549: BGT, 2024-03, 80.0
1200554: BGT, 2023-02, 100.0
1200549: BPT, 2024-01, 130, 70
1200420: BGT, 2023-03, 23.0
```

## 2. Search for test by ID.



Mars Messages	Run I/O
<input type="button" value="Clear"/>	Enter Patient ID to search: 1200752
	Choose an option: ----- 1. Retrieve all patient tests 2. Retrieve all up normal patient tests 3. Retrieve all patient tests in a given specific period 4. Go back to main menu

## 2.1 Retrieve all patient tests:

Mars Messages	Run I/O
<div>Clear</div>	<pre>----- 1. Retrieve all patient tests 2. Retrieve all up normal patient tests 3. Retrieve all patient tests in a given specific period 4. Go back to main menu ----- Enter an Option: 1 1200752: BPT, 2024-04, 100, 85</pre>

## 2.2 Retrieve all up normal patient tests:

Mars Messages	Run I/O
<div>Clear</div>	<pre>Enter an Option: 2  Enter Patient ID to search: 1200321  Choose an option: ----- 1. Retrieve all patient tests 2. Retrieve all up normal patient tests</pre>

Mars Messages	Run I/O
<div>Clear</div>	<pre>----- 1. Retrieve all patient tests 2. Retrieve all up normal patient tests 3. Retrieve all patient tests in a given specific period 4. Go back to main menu ----- Enter an Option: 2 1200321: HGB, 2023-05, 90.0</pre>

### 2.3 Retrieve all patient tests in a given specific period:

Mars Messages	Run I/O
<div>Clear</div>	7. Exit ----- Enter an Option: 2  Enter Patient ID to search: 1200549  Choose an option: -----

Mars Messages	Run I/O
<div>Clear</div>	----- Enter an Option: 3  Enter Min Period (YYYY-MM) : 2023-12  Enter Max Period (YYYY-MM) : 2024-05 1200549: BGT, 2024-03, 80.0 1200549: BPT, 2024-01, 130, 70

### 2.4 If we enter 4, we return to main menu

### 3. Searching for unnormal tests:

Mars Messages	Run I/O
<div>Clear</div>	5. Update an existing test result
	6. Delete a test
	7. Exit
	-----
	Enter an Option: 3
	Enter Test Name (HGB, BGT, LDL, BPT): LDL
	1200341: LDL, 2023-03, 120.0

### 4. Average test value:

<div>Clear</div>	The Average of Hgb: 52.5
	The Average of BGT: 90.0
	The Average of LDL: 103.5
	The Average of BPT: 115.0/77.5

## 5. Update an existing test result

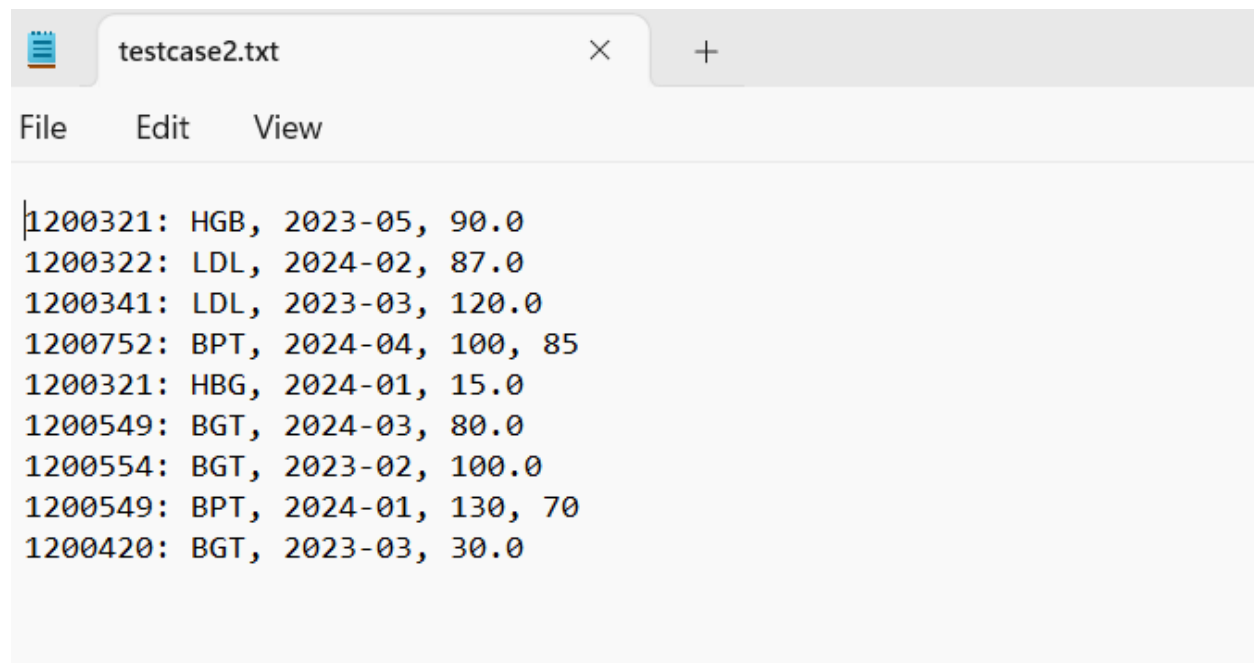
Mars Messages	Run I/O
<div>Clear</div>	5. Update an existing test result 6. Delete a test 7. Exit ----- Enter an Option: 5  1) 1200321: HGB, 2023-05, 90.0 2) 1200322: LDL, 2024-02, 87.0 3) 1200341: LDL, 2023-03, 120.0

Mars Messages	Run I/O
<div>Clear</div>	6) 1200549: BGT, 2024-03, 80.0 7) 1200554: BGT, 2023-02, 100.0 8) 1200549: BPT, 2024-01, 130, 70 9) 1200420: BGT, 2023-03, 23.0  Enter number of line for test to update: 9  BGT Enter The New Result: 30

Mars Messages	Run I/O
<div>Clear</div>	1200322: LDL, 2024-02, 87.0 1200341: LDL, 2023-03, 120.0 1200752: BPT, 2024-04, 100, 85 1200321: HBG, 2024-01, 15.0 1200549: BGT, 2024-03, 80.0 1200554: BGT, 2023-02, 100.0 1200549: BPT, 2024-01, 130, 70 1200420: BGT, 2023-03, 30.0 Test updated successfully.



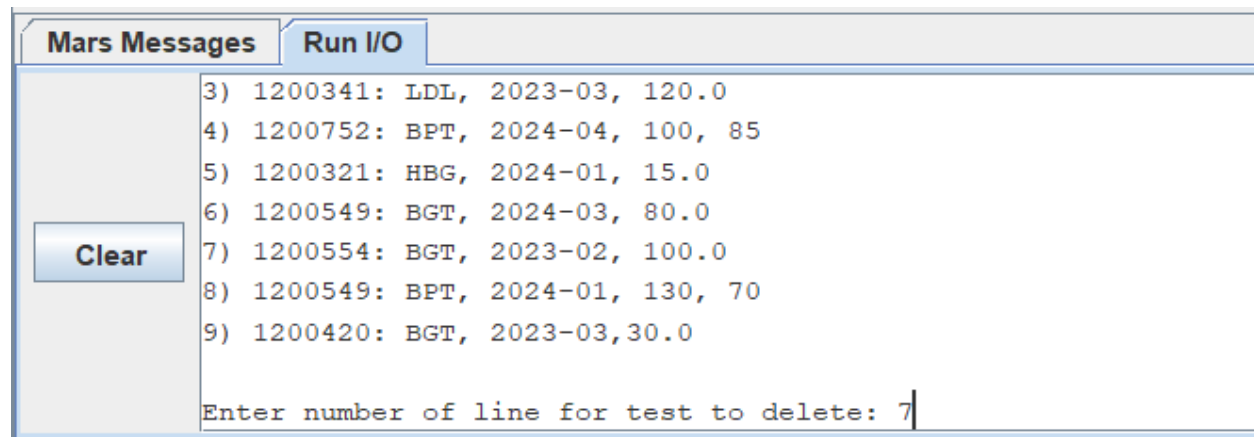
It was update in the file:



The screenshot shows a text editor window with a single tab titled 'testcase2.txt'. The window has a menu bar with 'File', 'Edit', and 'View'. The text content is as follows:

```
1200321: HGB, 2023-05, 90.0
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```

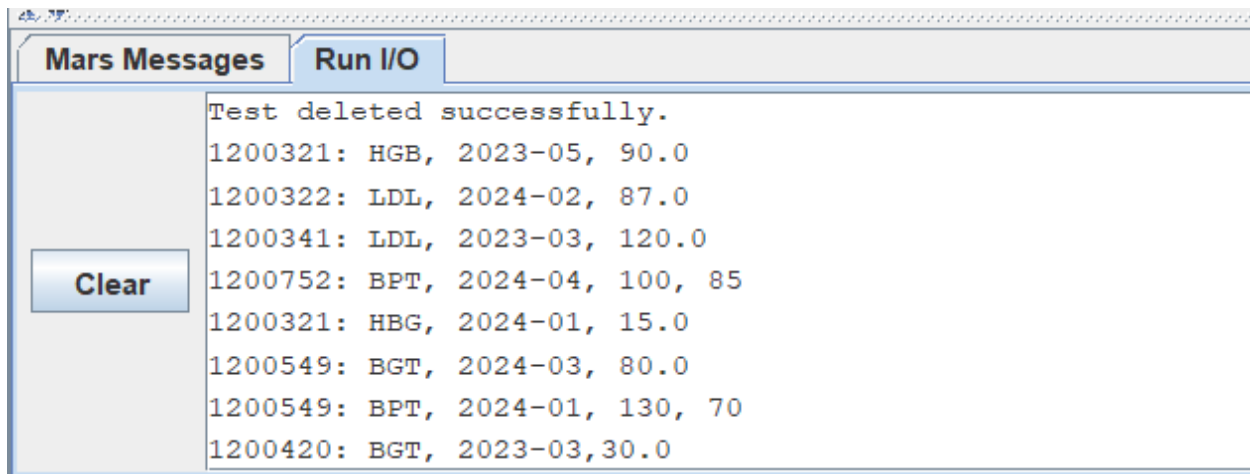
## 6. Delete a test



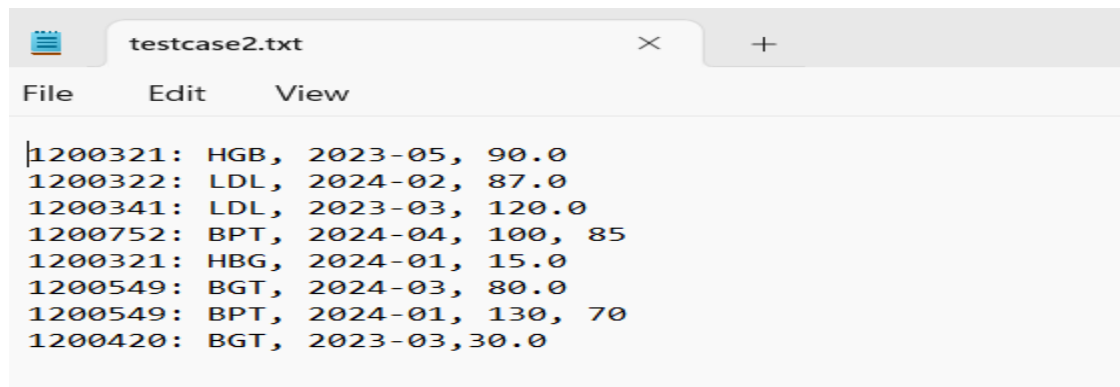
The screenshot shows a window titled 'Mars Messages' with a 'Run I/O' button. The window contains a list of test cases, each preceded by a number in parentheses. A 'Clear' button is located on the left side of the list. At the bottom, there is a text input field with the prompt 'Enter number of line for test to delete: 7'.

Mars Messages	Run I/O
3) 1200341: LDL, 2023-03, 120.0	
4) 1200752: BPT, 2024-04, 100, 85	
5) 1200321: HBG, 2024-01, 15.0	
6) 1200549: BGT, 2024-03, 80.0	
7) 1200554: BGT, 2023-02, 100.0	
8) 1200549: BPT, 2024-01, 130, 70	
9) 1200420: BGT, 2023-03, 30.0	

Enter number of line for test to delete: 7



It was delete in the file:



## 7. Exit

