



**DOKUZ EYLUL UNIVERSITY**  
**ENGINEERING FACULTY**  
**DEPARTMENT OF COMPUTER ENGINEERING**



**CME 2202 ADATA ORGANIZATION AND  
MANAGEMENT**  
**ASSIGNMENT 1 REPORT**

**by**

**ELİF ARAS - 2019510016**  
**MUZAFFER SEVİLİ - 2019510069**

**Lecturers**

**Asst. Prof. ÖZLEM AKTAS**

**İZMİR**

**24.04.2022**

## 1)EXPLANATION OF SOLUTION

Two building structures were used. In the "tag" structure, the data of the tags in the XML file is kept. In the "record" structure, the data of the tags in the XML file is kept.

The readFile() function is called from the "Main()" function.

### ReadFile() Function

The file "records.dat" whose path is specified is opened for reading using "fopen". The read file data is sent as a parameter to the createXMLFile(fp) function and the createXMLFile function is called.

### createXMLFile(FILE \*fp) Function

The "output.xml" file, whose path is specified, is opened for writing xml data using "fopen". Since 50 person data and 1 tag data, a for loop was used that will return 51 times. Using " fread(&recordItem, sizeof(recordItem), 1, fp)" the data read from the file is thrown into the tags. The data after the assignment to the tags were also transformed into "BigEndian" and sent as a parameter to the writingXMLFile() function to be written to the XML file.

### writingXMLFile(FILE \*fxml, struct record recordItem,struct tag tagHead, int id,uint32\_t littleEndian,uint32\_t bigEndian) Function

The value of each tag is printed to the XML file, line by line, together with the tag.

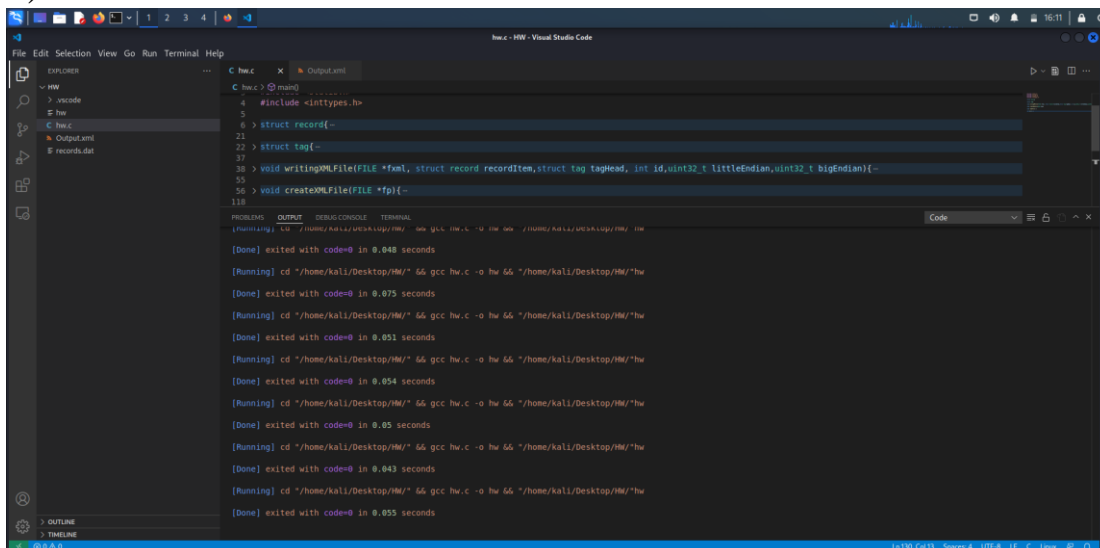
## 2)PROBLEM ENCOUNTERS

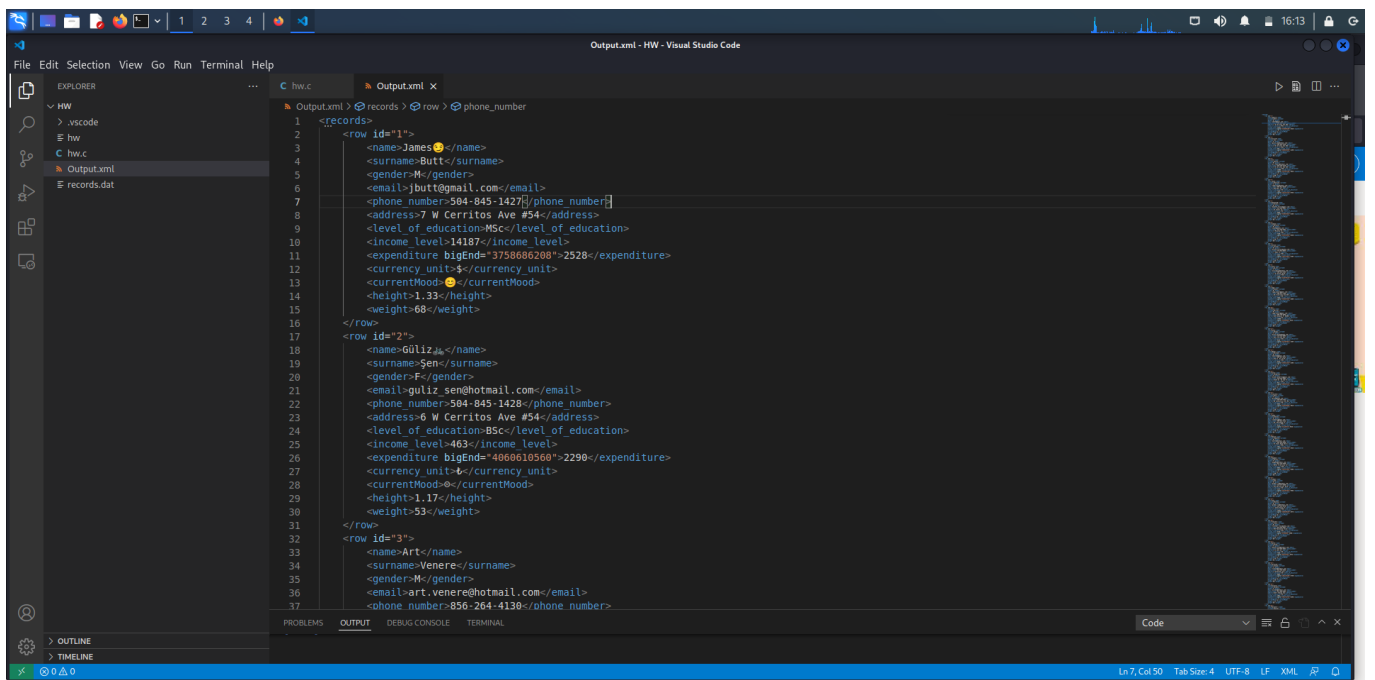
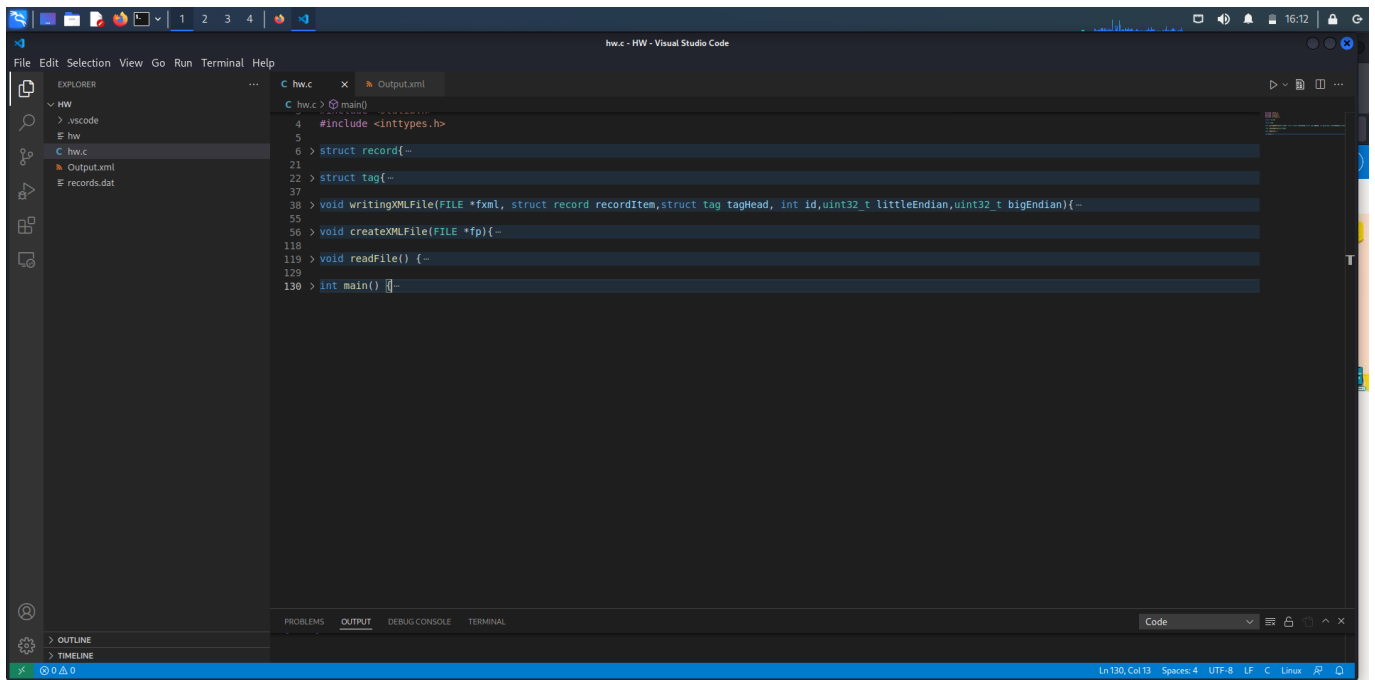
We had a problem reading the .dat file in the Windows operating system and we could not find a definitive solution. That's why we switched to the Linux operating system. We solved the problem by installing Kali in VirtualBox and editing our code over VS Code IDE.

Sometimes we encountered a segmentation error, we resolved this error by changing the path.

We could not code the validation part of the assignment. We searched a lot of sources, but we could not find useful documentation for validation. We could not use what we could reach.

## 3)SAMPLE SCREENSHOT





#### 4) REFERENCES

<https://stackoverflow.com/questions/19275955/convert-little-endian-to-big-endian>