

Assembly Language Project Documentation

PROJECT NAME: ISBN Checksum

TEAM NAME: Holymorphism

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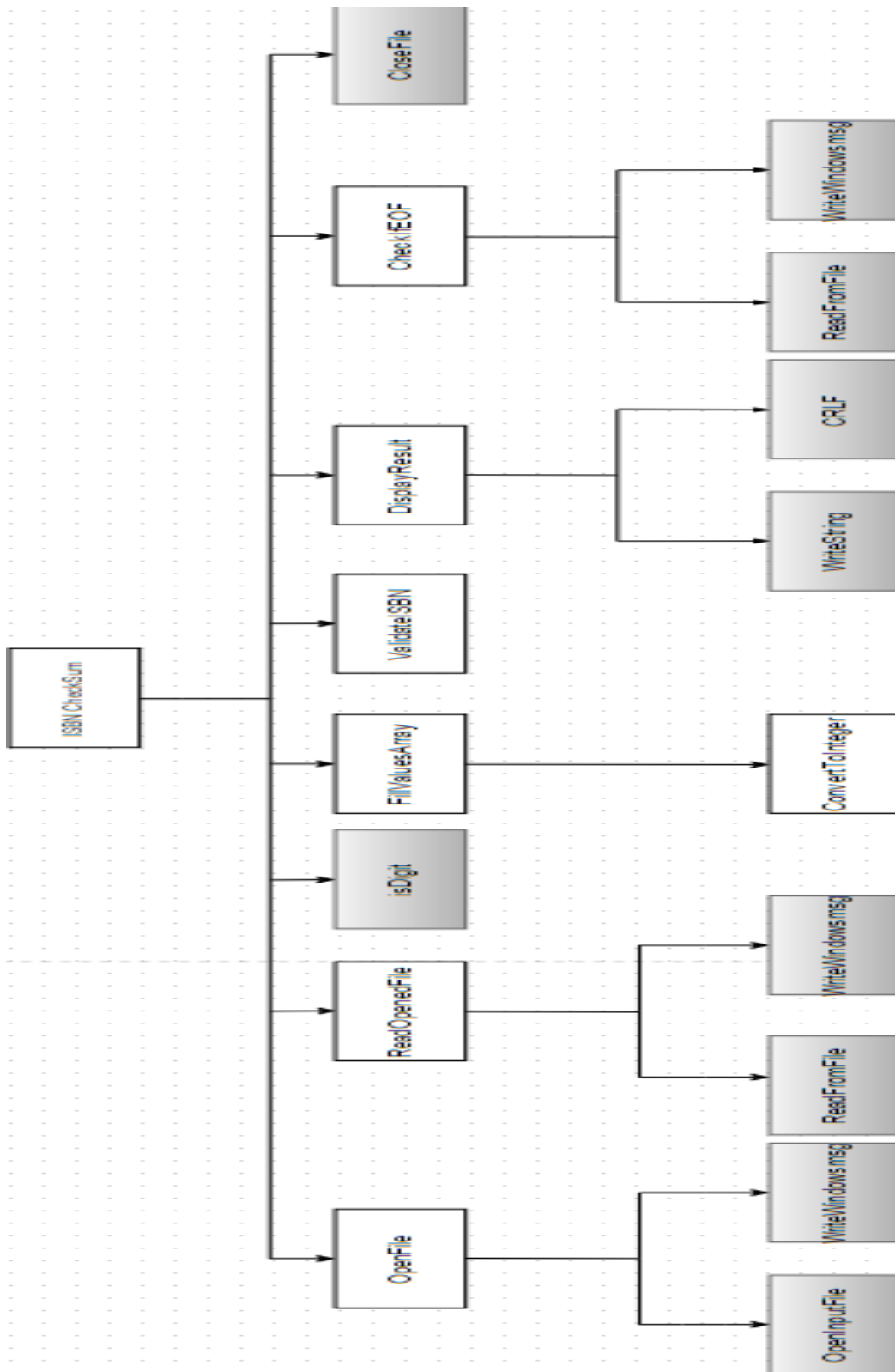
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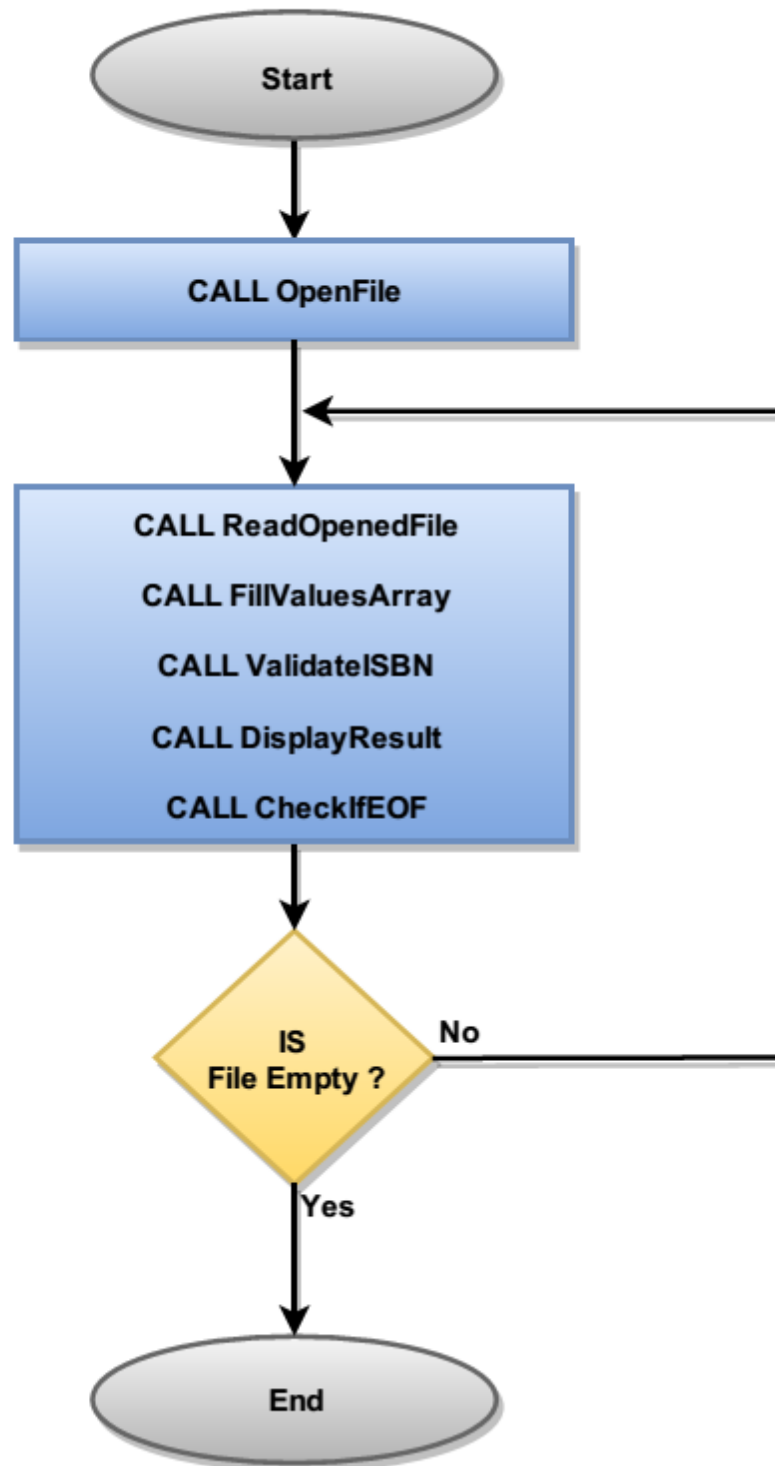
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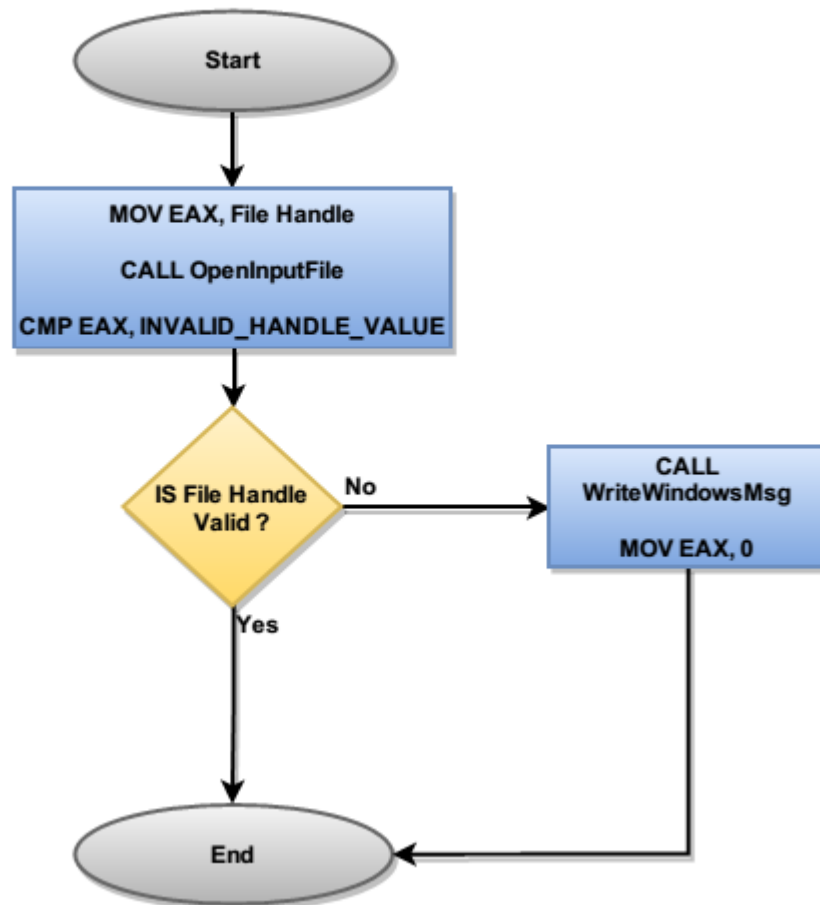
Structure Chart:



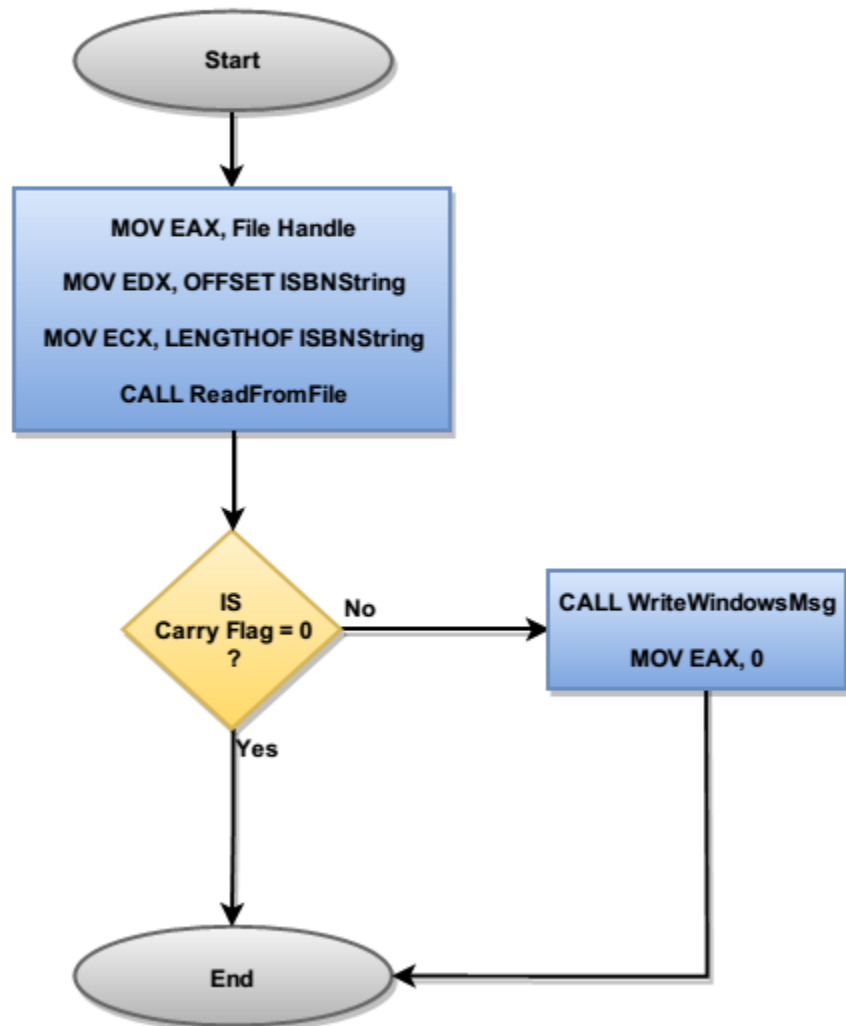
Main Procedure



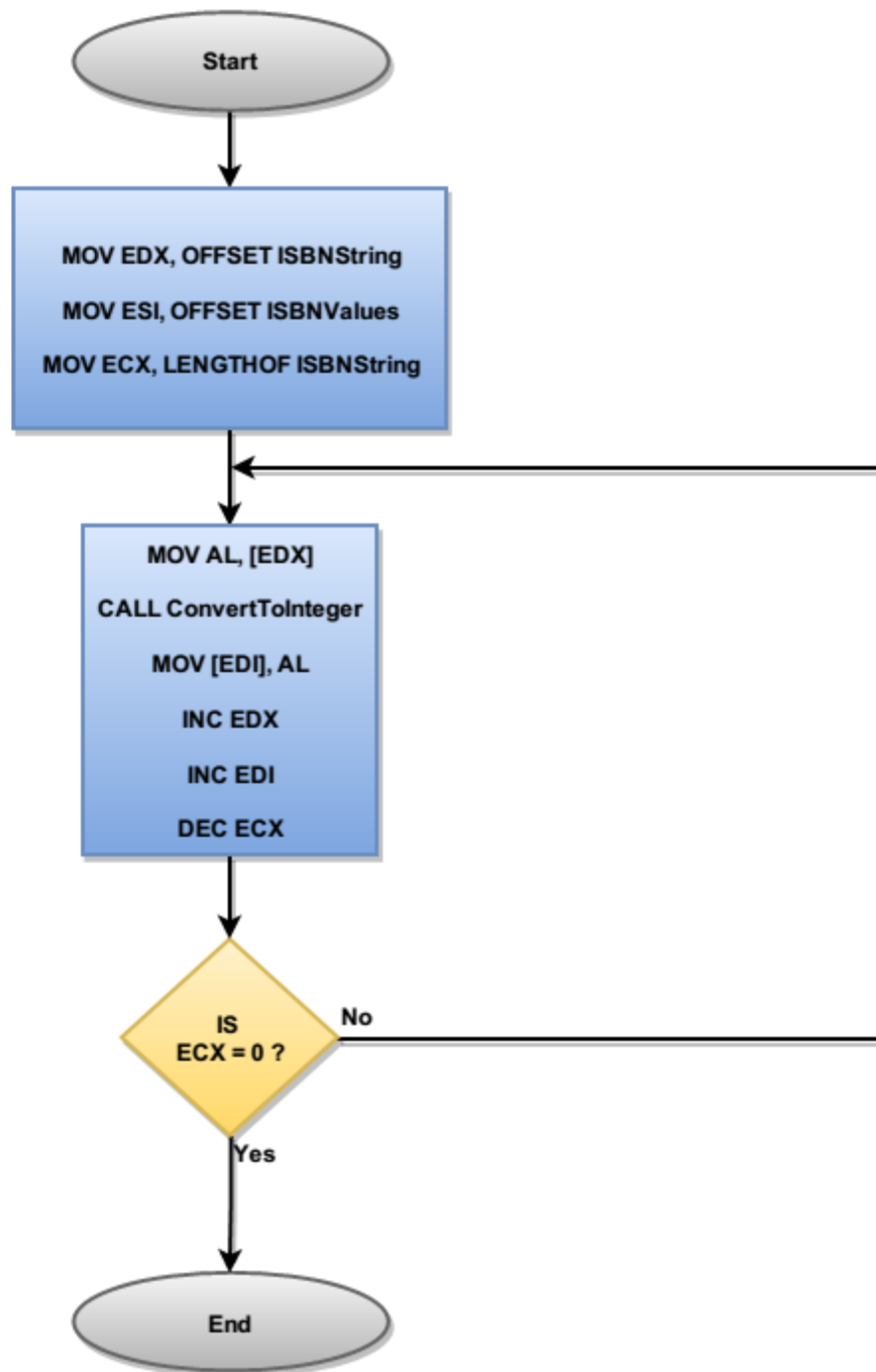
OpenFile Procedure



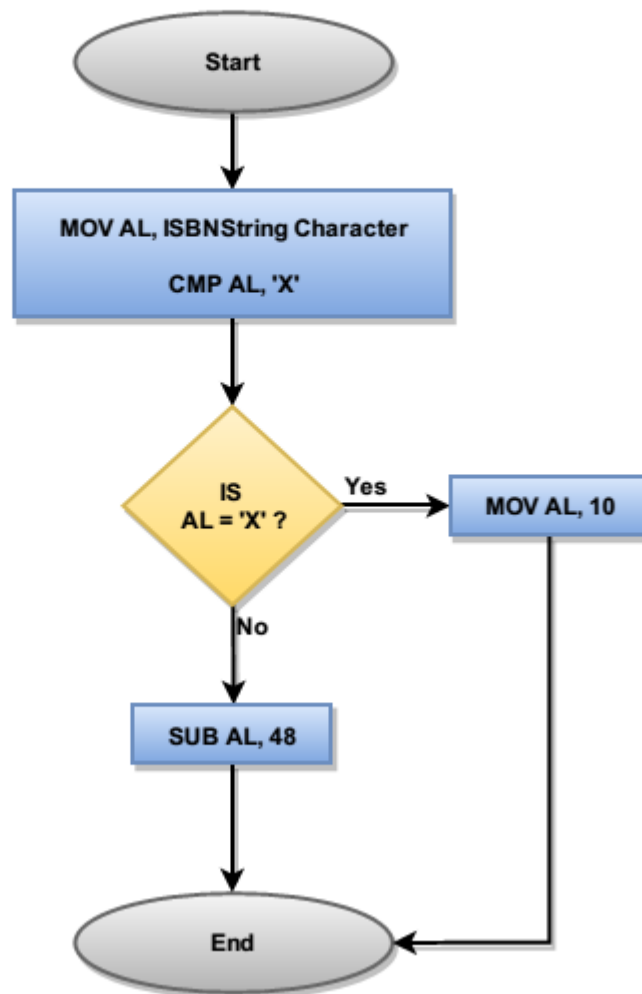
ReadOpenedFile Procedure



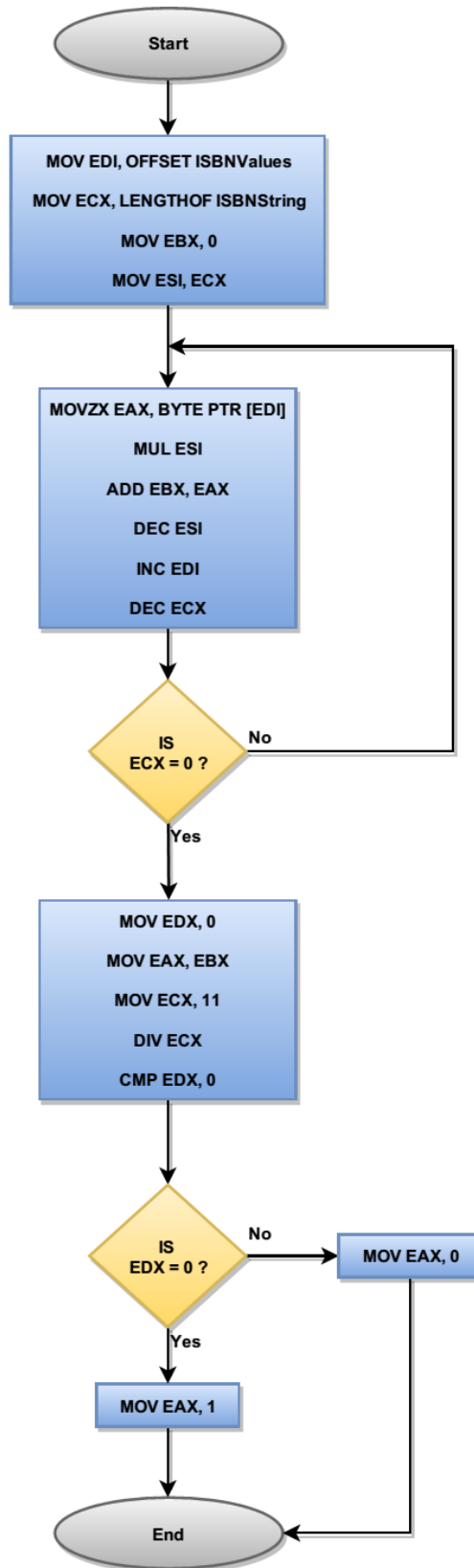
FillValuesArray Procedure



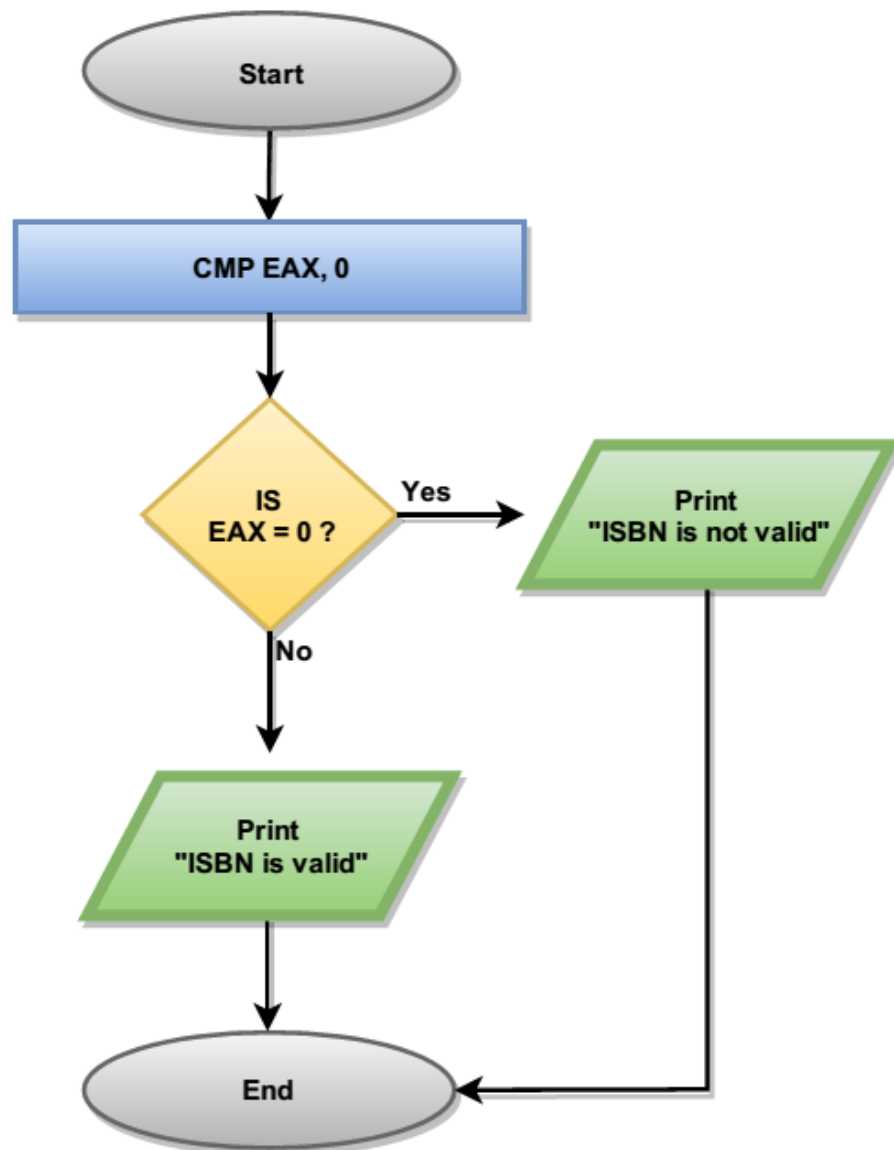
ConvertToInteger Procedure



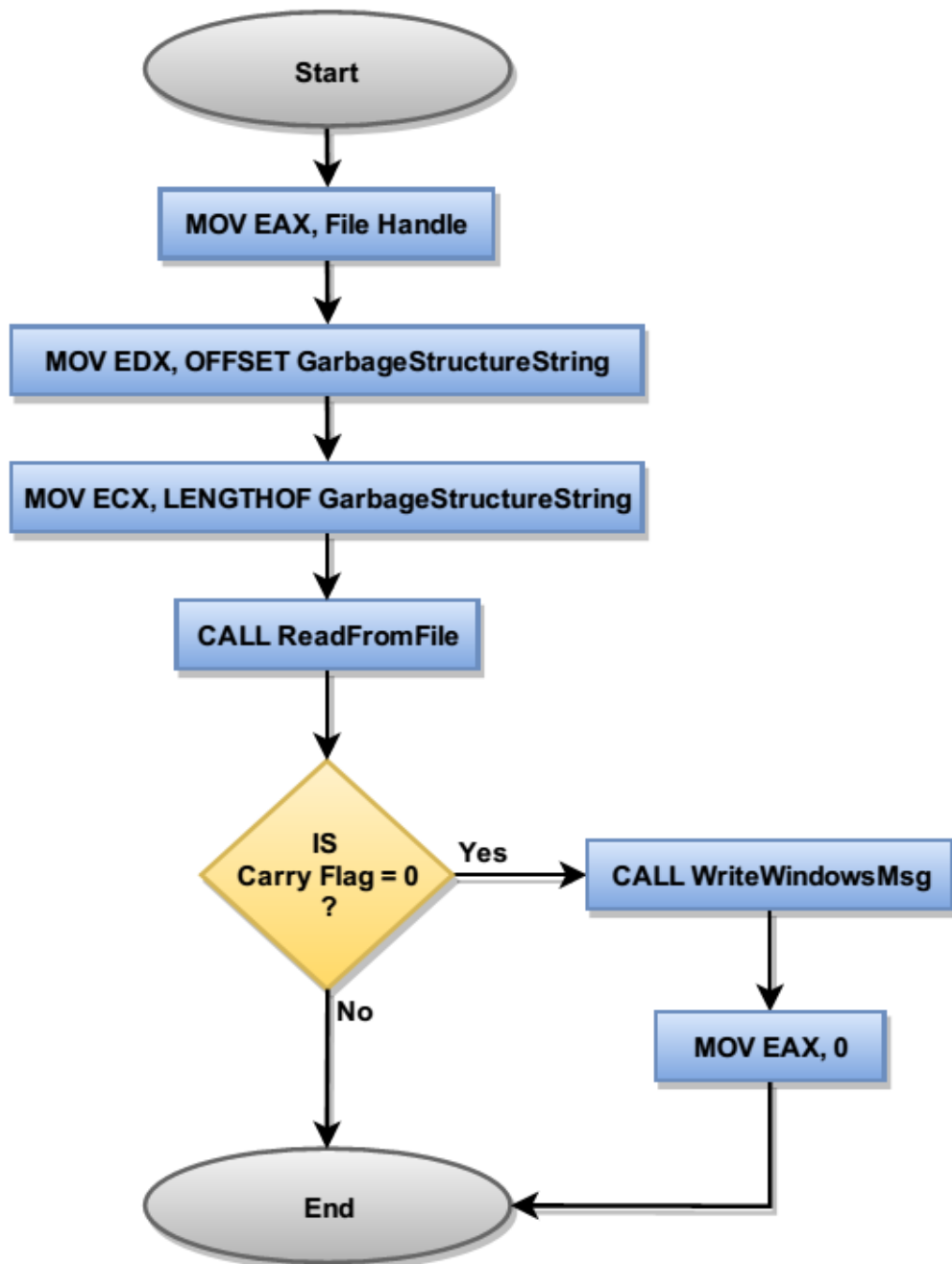
ValidateISBN Procedure



DisplayResult Procedure



CheckIfEOF Procedure



Test Cases:

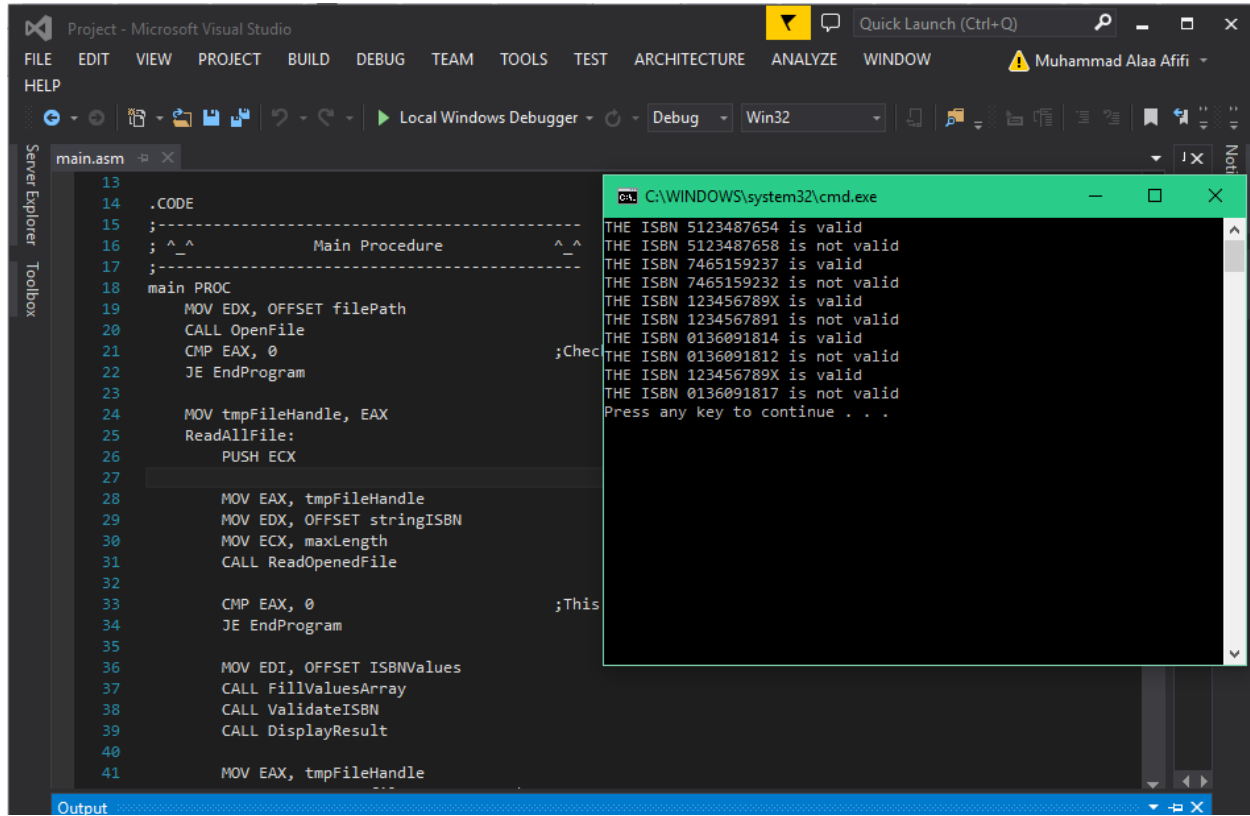
1. Project Test Cases:

Input	Output
5123487654	The ISBN 5123487654 is valid
5123487658	The ISBN 5123487658 is not valid
7465159237	The ISBN 7465159237 is valid
7465159232	The ISBN 7465159232 is not valid
123456789X	The ISBN 123456789X is valid
1234567891	The ISBN 1234567891 is not valid

2. Extra Test Cases:

Input	Output
0136091814	The ISBN 0136091814 is valid
0136091812	The ISBN 0136091812 is not valid
123456789X	The ISBN 123456789X is valid
0136091817	The ISBN 0136091817 is not valid

Sample Run Screenshot:



The screenshot shows the Microsoft Visual Studio IDE in debug mode. The main.asm file is open, displaying assembly code. A command prompt window is overlaid, showing the output of the program, which lists ISBNs and their validity. The output window is titled "C:\WINDOWS\system32\cmd.exe".

```
main.asm
13
14 .CODE
15 ;-----
16 ; ^ ^ Main Procedure ^ ^
17 ;-----
18 main PROC
19     MOV EDX, OFFSET filePath
20     CALL OpenFile
21     CMP EAX, 0 ;Check
22     JE EndProgram
23
24     MOV tmpFileHandle, EAX
25     ReadAllFile:
26     PUSH ECX
27
28     MOV EAX, tmpFileHandle
29     MOV EDX, OFFSET stringISBN
30     MOV ECX, maxLength
31     CALL ReadOpenedFile
32
33     CMP EAX, 0 ;This
34     JE EndProgram
35
36     MOV EDI, OFFSET ISBNValues
37     CALL FillValuesArray
38     CALL ValidateISBN
39     CALL DisplayResult
40
41     MOV EAX, tmpFileHandle
    ...
```

Output:

```
C:\WINDOWS\system32\cmd.exe
THE ISBN 5123487654 is valid
THE ISBN 5123487658 is not valid
THE ISBN 7465159237 is valid
THE ISBN 7465159232 is not valid
THE ISBN 123456789X is valid
THE ISBN 1234567891 is not valid
THE ISBN 0136091814 is valid
THE ISBN 0136091812 is not valid
THE ISBN 123456789X is valid
THE ISBN 0136091817 is not valid
Press any key to continue . . .
```