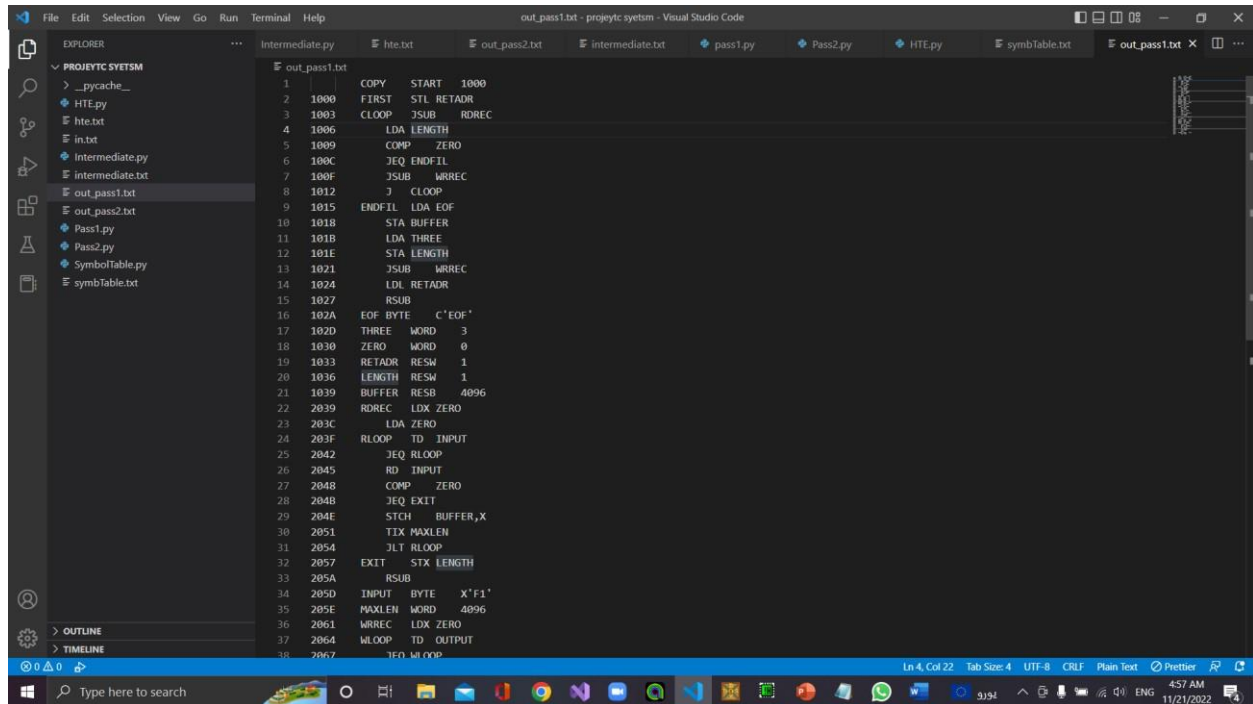


Systems programming Project

This project is done under the supervision of Arab Academy for Science and Technology

To run program open & run Intermediate.py

Code must have 1 tab



The screenshot shows the Visual Studio Code interface with the file explorer on the left displaying a project named 'PROJECTC SYSTSM'. The file explorer lists files: __pycache__, HTE.py, hte.txt, in.txt, Intermediate.py, intermediate.txt, out_pass1.txt, out_pass2.txt, Pass1.py, Pass2.py, SymbolTable.py, and symbTable.txt. The main editor window is open to 'out_pass1.txt', displaying assembly code. The code is as follows:

```
1 | COPY START 1000
2 | FIRST STL RETADR
3 | 1003 CLOOP JSUB RDRCC
4 | 1006 LDA LENGTH
5 | 1009 COMP ZERO
6 | 100C JEQ ENDFIL
7 | 100F JSUB WRREC
8 | 1012 J CLOOP
9 | 1015 ENDFIL LDA EOF
10 | 1018 STA BUFFER
11 | 101B LDA THREE
12 | 101E STA LENGTH
13 | 1021 JSUB WRREC
14 | 1024 LDJ RETADR
15 | 1027 RSUB
16 | 102A EOF BYTE C'EOF'
17 | 102D THREE WORD 3
18 | 1030 ZERO WORD 0
19 | 1033 RETADR RESW 1
20 | 1036 LENGTH RESW 1
21 | 1039 BUFFER RESB 4096
22 | 2039 RDRCC LDX ZERO
23 | 203C LDA ZERO
24 | 203F RLOOP TD INPUT
25 | 2042 JEQ RLOOP
26 | 2045 RD INPUT
27 | 2048 COMP ZERO
28 | 204B JEQ EXIT
29 | 204E STCH BUFFER,X
30 | 2051 TDX MAXLEN
31 | 2054 JLT RLOOP
32 | 2057 EXIT STX LENGTH
33 | 205A RSUB
34 | 205D INPUT BYTE X'F1'
35 | 205E MAXLEN WORD 4096
36 | 2061 WRREC LDX ZERO
37 | 2064 WLOOP TD OUTPUT
38 | 2067 TEQ WLOOP
```

The status bar at the bottom indicates 'Ln 4, Col 22', 'Tab Size: 4', 'UTF-8', 'CRLF', 'Plain Text', and 'Prettier'. The system tray shows the time as 4:57 AM on 11/21/2022.

```
1 1000 COPY
2 1000 FIRST
3 1003 CLOOP
4 1015 ENDFIL
5 102A EOF
6 102D THREE
7 1030 ZERO
8 1033 RETADR
9 1036 LENGTH
10 1039 BUFFER
11 2039 RDREC
12 203F RLOOP
13 2057 EXIT
14 205D INPUT
15 205E MAXLEN
16 2061 WRREC
17 2064 WLOOP
18 2079 OUTPUT
19
```

```
1 1000 COPY START 1000 0B0000
2 1000 FIRST STL RETADR 141033
3 1003 CLOOP JSUB RDREC 482039
4 1006 LDA LENGTH 001036
5 1009 COMP ZERO 280000
6 100C JEQ ENDFIL 301015
7 100F JSUB WRREC 482061
8 1012 J CLOOP 3C0000
9 1015 ENDFIL LDA EOF 00102A
10 1018 STA BUFFER 0C1039
11 101B LDA THREE 00103D
12 101E STA LENGTH 0C1036
13 1021 JSUB WRREC 482061
14 1024 LDL RETADR 001033
15 1027 RSUB 4C0000
16 102A EOF BYTE C'EOF' 454F46
17 102D THREE WORD 3 000003
18 1030 ZERO WORD 0 000000
19 1033 RETADR RESW 1
20 1036 LENGTH RESW 1
21 1039 BUFFER RESB 4096
22 2039 RDREC LDX ZERO 040000
23 203C LDA ZERO 000000
24 203F RLOOP TD INPUT E0205D
25 2042 JEQ RLOOP 300000
26 2045 RD INPUT 08205D
27 2048 COMP ZERO 280000
28 2048 JEQ EXIT 302057
29 204E STCH BUFFER,X 549039
30 2051 TIX MAXLEN 2C205E
31 2054 JLT RLOOP 380000
32 2057 EXIT STX LENGTH 101036
33 205A RSUB 4C0000
34 205D INPUT BYTE X'F1' F1
35 205E MAXLEN WORD 4096 001000
36 2061 WRREC LDX ZERO 040000
37 2064 WLOOP TD OUTPUT E02079
38 2067 JEQ WLOOP 302064
```

