```
~/Programs$ ./a.out
Type the variable
vansd123

Valid Variable
~/Programs$ ./a.out
Type the variable
90vans
Invalid Variable
~/Programs$ █
```

Programs/Input.txt

```
1   **      START    2000
2   **      LDA      FIVE
3   **      STA      ALPHA
4   **      LDCH     CHARZ
5   **      STCH     C1
6   ALPHA RESW    2
7   FIVE  WORD    5
8   CHARZ BYTE    C'Z'
9   C1    RESB    1
10  **      END      **|
```

Programs/Out.txt

```
1          **      START  2000
2   2000   **      LDA    FIVE
3   2003   **      STA    ALPHA
4   2006   **      LDCH    CHARZ
5   2009   **      STCH   C1
6   2012   ALPHA RESW    2
7   2018   FIVE  WORD    5
8   2021   CHARZ BYTE    C'Z'
9   2022   C1    RESB    1
10  2023   **      END    **
11  |
```

~/Programs$ ./a.out
The length of the code:23
~/Programs$ █

Programs/Out.txt

```
1              **      START    2000
2    2000      **      LDA      FIVE
3    2003      **      STA      ALPHA
4    2006      **      LDCH      CHARZ
5    2009      **      STCH     C1
6    2012      ALPHA RESW       2
7    2018      FIVE    WORD     5
8    2021      CHARZ BYTE       C'Z'
9    2022      C1      RESB     1
10   2023      **      END      **
11   |
```

Programs/Symtabl.txt

```
1    ALPHA  2012
2    FIVE   2018
3    CHARZ  2021
4    C1     2022
5
```

Programs/Optab.txt

```
1    START       *
2    LDA       03
3    STA       0f
4    LDCH       53
5    STCH       57
6    END       *
```