

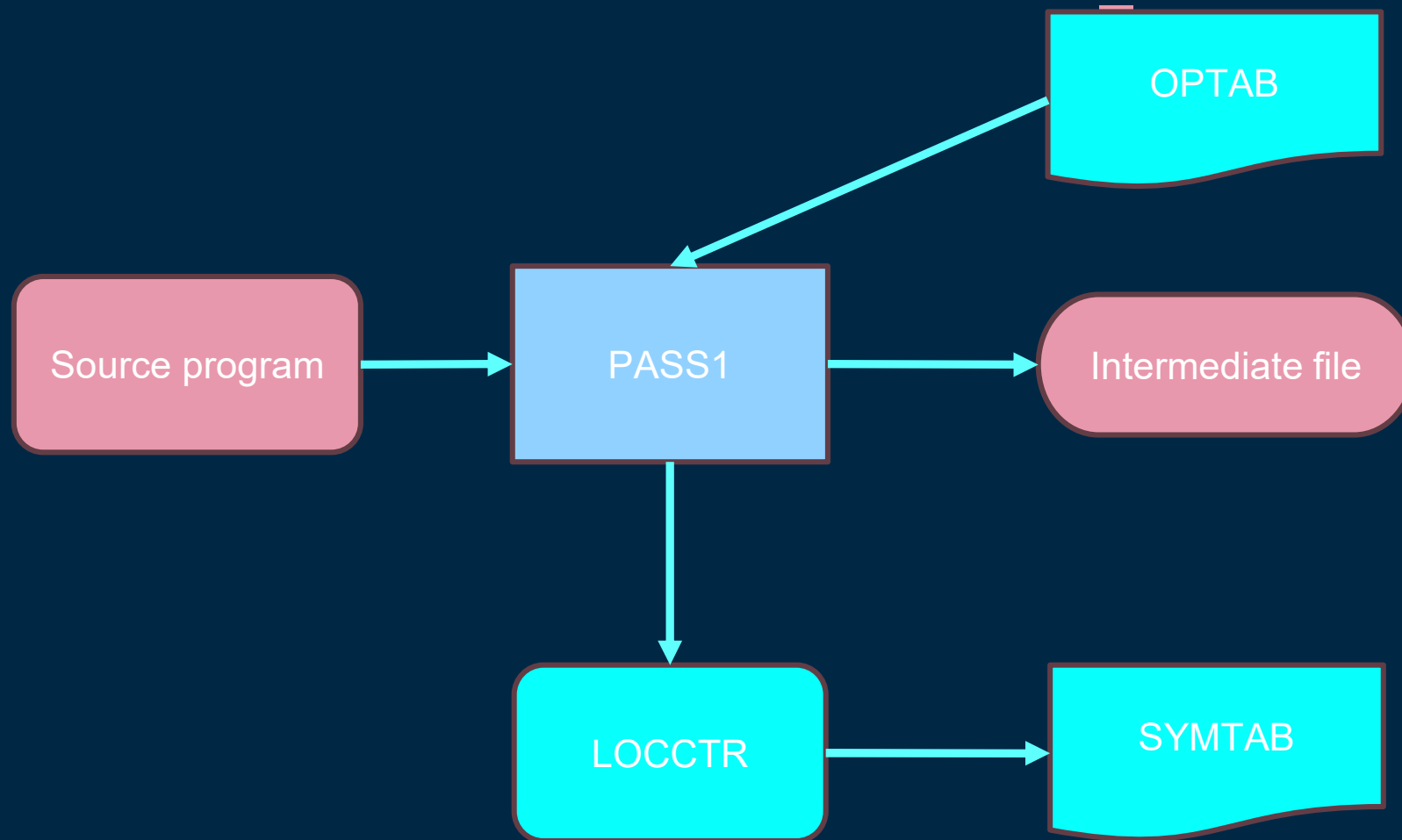
# SIC Design

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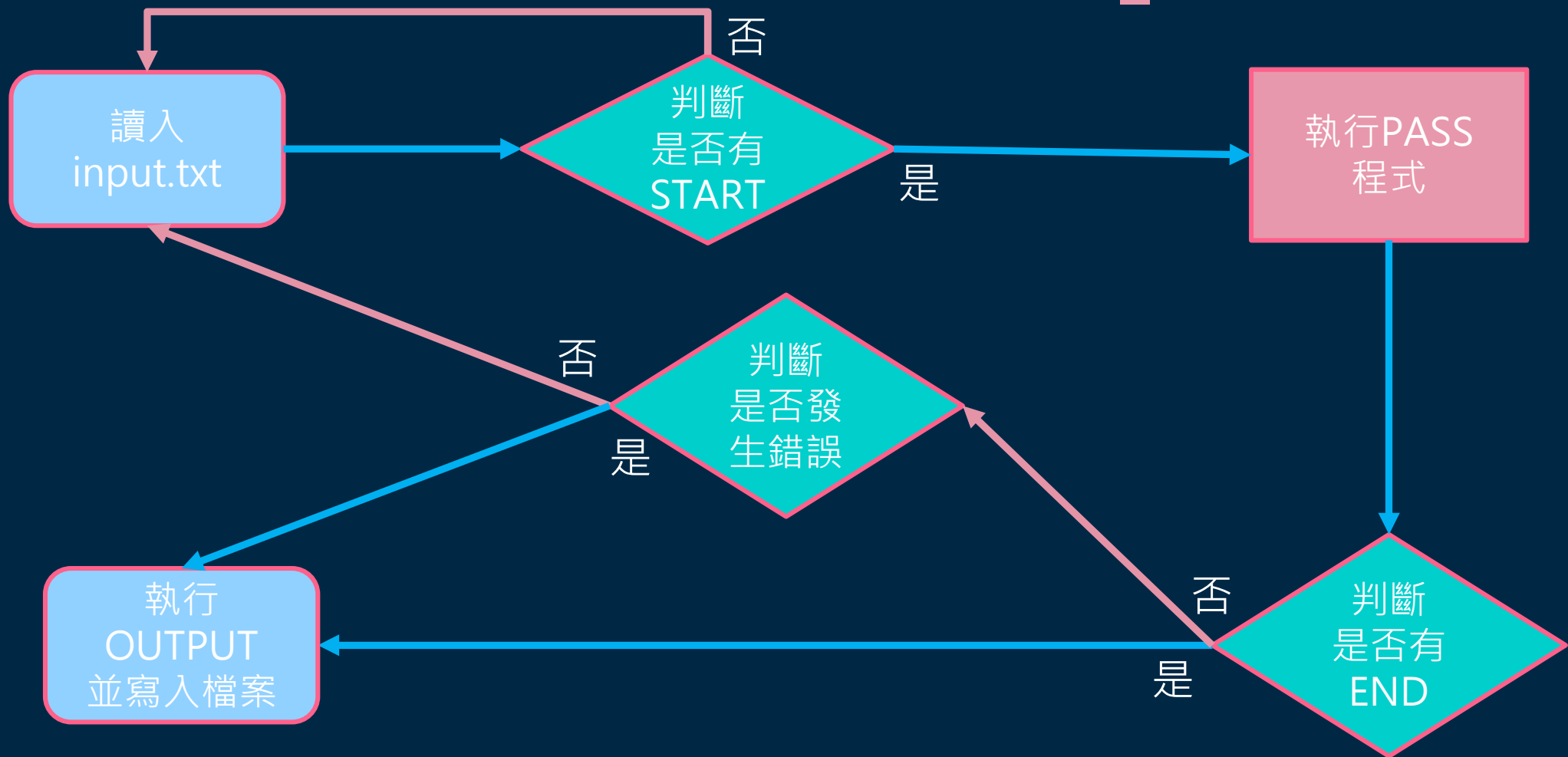
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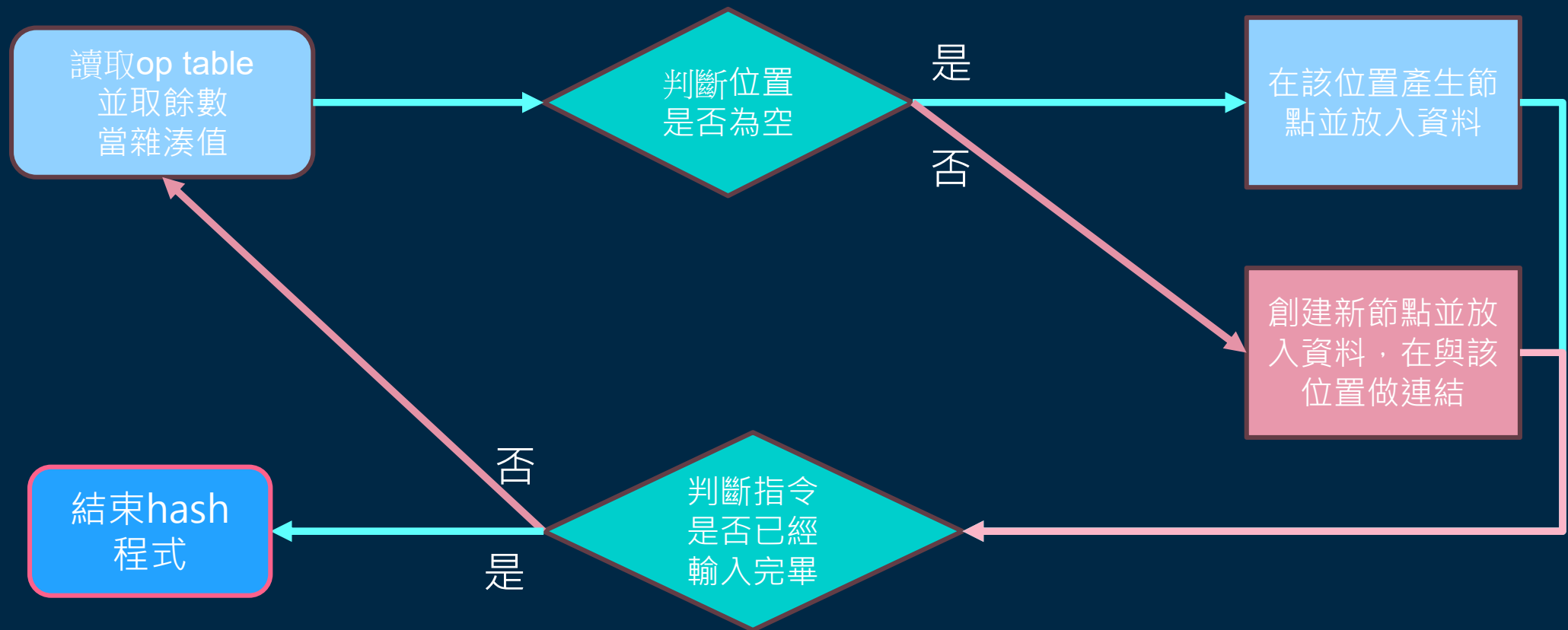
# SIC 流程



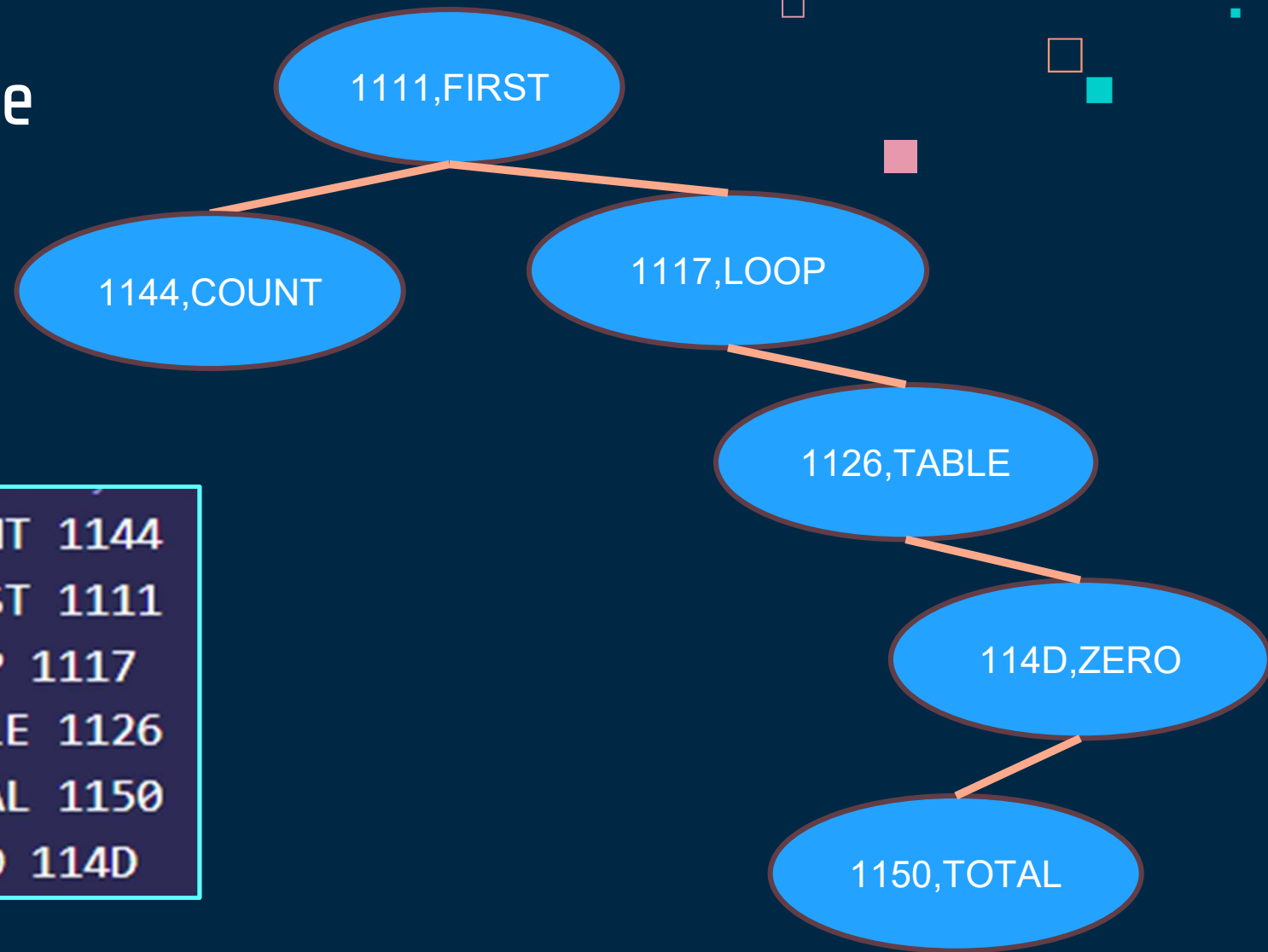
# PASS1 流程



# Hash table 流程



# Binary tree



1	COUNT	1144
2	FIRST	1111
3	LOOP	1117
4	TABLE	1126
5	TOTAL	1150
6	ZERO	114D

# Location 流程

```
else if(fo=="WORD"){
    code=word_change();
    loc+=3;
}
else if(fo=="BYTE"){
    if(retadr[0]=='c'){
        loc+=retadr.length()-3; //Minus c and two '
        for(i=2;i<retadr.length()-1;i++){
            n=retadr[i];
            code+=inttoA(retadr[i]);
        }
    }
    else if(retadr[0]=='x'){
        for(i=2;i<retadr.length()-1;i++){
            code+=retadr[i];
        }
        loc+=(retadr.length()-3+1)/2;
    }
}
else if(fo=="RESB"){
    loc+=get_byte();
    code="";
}
else if(fo=="RESW"){
    byten=get_byte();
    loc+=byten*3;
    code="";
}
else if(fo=="END"){
    endflag=1;
}
```

讀入  
op code

判斷是否有  
WORD/BYTE/  
RESB/RESW/E  
ND

WORD	→	loc=loc+3
BYTE	→	'c' :loc=loc+n 'x' :loc=loc+n/2
RESB	→	loc=loc+hex(n)
RESW	→	loc=loc+n*3
END	→	endflag=true

做相對應的動作

# Input.txt

1	FIRST	START	1111
2		LDX	ZERO
3		LDA	ZERO
4	LOOP	ADD	TABLE,X
5		TIX	COUNT
6		JLT	LOOP
7		STA	TOTAL
8		RSUB	
9	TABLE	RESW	10
10	COUNT	RESW	3
11	ZERO	WORD	2
12	TOTAL	RESB	2
13		END	FIRST



# Output.txt

1	FIRST	START	1111		
2	1111		LDX	ZERO	
3	1114		LDA	ZERO	
4	1117	LOOP	ADD	TABLE,X	
5	111A		TIX	COUNT	
6	111D		JLT	LOOP	
7	1120		STA	TOTAL	
8	1123		RSUB		
9	1126	TABLE	RESW	10	
10	1144	COUNT	RESW	3	
11	114D	ZERO	WORD	2	
12	1150	TOTAL	RESB	2	
13		END	FIRST		



The background is a dark blue field decorated with a sparse pattern of thin white vertical lines and small squares. The squares are in various colors: teal, orange, pink, and yellow. Some squares are solid, while others are just outlines. The lines and squares are scattered across the slide, creating a modern, minimalist aesthetic.

Thank *you*  
*for* listening