

27.2 Extracting Character String Data from the Left/Right

LEFT(_E), RIGHT(_E)

FX5S FX5UJ FX5U FX5UC

- LEFT(_E): These functions output specified number of characters from the left of input character string data.
- RIGHT(_E): These functions output specified number of characters from the right of input character string data.

Ladder diagram, FBD/LD		Structured text
[Without EN/ENO]	[With EN/ENO]	[Without EN/ENO] d:=LEFT(s,n); d:=RIGHT(s,n); [With EN/ENO] d:=LEFT_E(EN,ENO,s,n); d:=RIGHT_E(EN,ENO,s,n);

Setting data

■Descriptions, types, and data types

Argument	Description	Type	Data type
EN	Execution condition (TRUE: Execution, FALSE: Stop)	Input variable	BOOL
s(IN)	Input	Input variable	STRING(255)
n(L)	Specification of number of characters to be extracted	Input variable	INT
ENO	Output status (TRUE: Normal, FALSE: Abnormal)	Output variable	BOOL
d(LEFT(_E) / RIGHT(_E))	Output	Output variable	STRING(255)

Processing details

■Operation processing

- LEFT(_E)
These functions output the data for the specified number of characters from the left of a character string input to (s) from (d).
The value input to (n) specifies the number of characters to be extracted.

Ex.

When the value input to (n) is 7

"ABCDEF12345"

High-order byte Low-order byte

+0	42H (B)	41H (A)
+1	44H (D)	43H (C)
+2	46H (F)	45H (E)
+3	32H (2)	31H (1)
+4	34H (4)	33H (3)
+5	00H	35H (5)

(1)

➡

"ABCDEF1"

High-order byte Low-order byte

+0	42H (B)	41H (A)
+1	44H (D)	43H (C)
+2	46H (F)	45H (E)
+3	00H	31H (1)

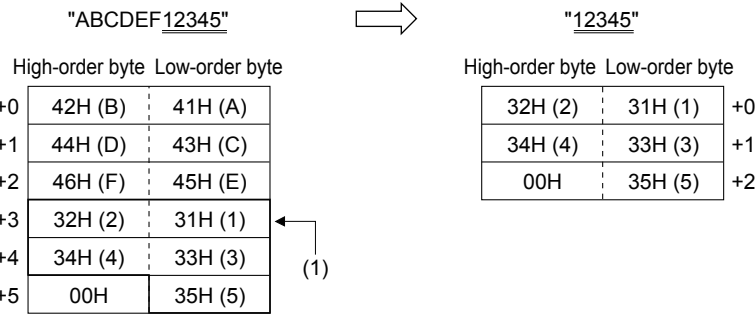
(1): Number of characters to be extracted (L): 7

• RIGHT(_E)

These functions output the data for the specified number of characters from the right of a character string input to (s) from (d).
The value input to (n) specifies the number of characters to be extracted.

Ex.

When the value input to (n) is 5



- A value input to (s) is the STRING type data value and within the range from 0 to 255 byte(s).
- A value input to (n) is the INT type data value and within the range from 0 to 255. (However, the value must be within the number of characters of the character string to be input to (s).)

■Operation result

1. Function without EN/ENO

The operation processing is executed. The operation output value is output from (d).

2. Function with EN/ENO

The following table lists the execution conditions and operation results.

Execution condition	Operation result	
EN	ENO	(d)
TRUE (Executes operation)	TRUE	Operation output value
FALSE (Stops operation)	FALSE ^{*1}	Indefinite value

^{*1} When FALSE is output from ENO, data output from (d) is undefined. In that case, modify a program so that the data output from (d) is not used.

Operation error

There is no operation error.