

SAS

- DS2

- if-then/else
- do until
- method
- data
- select
- json > getNextToken
- http > executeMethod
- http > setResponseBodyCharacterSet
- http > addSASOAuthToken
- YYMMDDxw.
- BESTw.
-
- DS2
- leave

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- [illegible]

- [illegible]

- DS200 (000)

-  _____
-  _____
-  _____ n 

- DS2 ()

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- ☐ 
- ☐ 
- ☐ 
- ☐  URL 

- DS2 ()

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- ☐ SAS $\square\square\square\square\square\square\square\square\square\square\square\square$
- ☐ $2\square$ SAS $\square\square\square\square\square\square\square\square$

- CAS

- [illegible]

- Intelligent Decisioning

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- SAS Studio

DS2

if-then/else???????

[https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/p1swn0a4ufdvn3n1e67d75roy6ns.h
tm](https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/p1swn0a4ufdvn3n1e67d75roy6ns.htm)

DS2

do until???????

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https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/p0p2sapr15j0z4n14o4b0v1i2xb7.htm#n0y0tj44j79ow1n15beup6finonl

```
proc ds2;
  data _null_;
    method run();
      k = 1;
      do until(k > 6);
        k = k + 1;
      end;
    end; /* method end*/
  enddata;
end;
```

DS2

method???????

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/p0vkktkd156jhqn11izdgfpg0hou.htm

DS2

data???????

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n1ew9uzutoyamjn1kzz8f194xhes.htm

select???????

CASE[]

https://go.documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n01kskbbawu6isn1vee8uw50jzvu.htm

- []
 - `select(variable); when(1) [ ]1; when(2) [ ]2; end;`
- [] [] 1[] do; [] end;[]
 - `select(variable); when(1); do; [ ]1; end; when(2); do; [ ]2; end; end;`
- [] when[] otherwise[]

▼[]

```
select(variable);
  when(1) [ ]1;
  when(2) [ ]2;
end;`
```

▼[] 1[]

```
select(variable);
  when(1); do;
    [ ]1-1;
    [ ]1-2;
    [ ]1-3;
  end;
  when(2) [ ]2;
end;`
```

▼[]

```
mon = 'JUN';
temp = 30
select;
  when (mon in ('JUN', 'JUL', 'AUG') and temp > 28);
    put 'SUMMER ' mon=;
  when (mon in ('MAR', 'APR', 'MAY'));
    put 'SPRING ' mon=;
```

```
otherwise;  
    put 'FALL OR WINTER ' mon=;  
end;
```

DS2

json????? > getNextToken????

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n1qnsau40tm51pn169k767jyw7is.htm

DS2

http????? > executeMethod????

[https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n1we0n5bkmyj3n1oglx8is6ogqo.h
tm](https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n1we0n5bkmyj3n1oglx8is6ogqo.htm)

DS2

http????? > setResponseBodyCharacterSet????

UTF-8

```
http_pkg.setResponseBodyCharacterSet('UTF-8')
```

[https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n057ts3z5uqaemn1vtd7vayor79q.h
tm](https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n057ts3z5uqaemn1vtd7vayor79q.htm)

DS2

http????? > addSASOAuthToken????

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/p0wc0obw28cy6wn1q8kvblfjf6vc.htm

DS2

YYMMDDxw. ?????

yyyy-mm-dd ☐ yyyy/mm/dd ☐☐☐☐☐☐☐☐ SAS☐☐☐☐☐☐☐☐

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n02pxkowzaiavfn1lwe6v95ps5pg.htm

DS2

BESTw. ????

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/p06s6plgjq7rugn1fdf0sckkz0hx.htm

?????

演算子	説明
+	加算
-	減算
*	乗算
/	除算
**	乗べき乗
><	比較演算子
<>	比較演算子

?????

真 (True)は 1, 偽 (False)は 0

文字列は ' ' で囲む

演算子	説明
=, eq	等しい (Equal)
^=, ~=, ne	等しくない (Not Equal)
>, gt	より大きい (Greater Than)
>=, ge	より大きいまたは等しい (Greater Equal)
<, lt	より小さい (Lesser Than)
<=, le	より小さいまたは等しい (Lesser Equal)

?????

演算子	説明	例
not, ^, ~	否定	not 1
or, , !	論理和	
and, &	論理積	

IN???

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□	□□	□□
a in (1, 2, 3)	a = 1	1(True)
a not in (1, 2, 3)	a = 1	0(False)

???????

□□	□□
□□□□□□	, !!

DS2

DS2??????

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2pg/p1rnsddd78roken1tlwnfk4poavl.htm

DS2

leave??????



https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/p1irdset32xggmn1c7dwqmthxvnd.htm

??????????

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json????????????????

DATAGRID_CREATE

```
DATAGRID_CREATE(dataGrid, jsonString);

/*   */
dcl package datagrid dg();
jsonString = '{"metadata":[{"column_1":"string"}],{"data":[{"text1"}, ["text2"]]}';
DATAGRID_CREATE(dg, jsonString);
```

https://go.documentation.sas.com/doc/jp/edmcddc/v_056/edmdatagrids/p1b00g0lvqulmxn196x7y6q92yxb.htm



??????????

DATAGRID_COPY

DATAGRID_COPY(sourceDataGrid, targetDataGrid)

https://go.documentation.sas.com/doc/jp/edmcddc/v_056/edmdatagrids/p0ff2os5c08sj7n1oel2xofqyny.htm



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DATAGRID_CLEARDATA

DATAGRID_CLEARDATA(dataGrid)

https://go.documentation.sas.com/doc/jp/edmcddc/v_056/edmdatagrids/n1shy8y4bvhh6gn112k7w50mpifx.htm

??????

```
DATAGRID_ADDCOLUMN(dataGrid, columnName, columnType);
```

- <https://go.documentation.sas.com/doc/jp/edmc/v056/edmdatagrids/n1djgke34f9wdhn15rsisdozptej.htm>



??????

DATAGRID_DELETECOLUMN

```
DATAGRID_DELETECOLUMN(dataGrid, columnName);
```

https://go.documentation.sas.com/doc/jp/edmcddc/v_056/edmdatagrids/n07yra1v2tnuxdn1ei3rsz8lzi2h.htm

??????

DATAGRID_ADDROW(□□□□□□□□, <□□>□□□□□□)

```
datagrid_rownum = DATAGRID_ADDROW(dataGrid);
```

https://go.documentation.sas.com/doc/jp/edmcddc/v_056/edmdatagrids/n109izonc0diazn0z2gy6wqehync.htm

□□□□□□□□

??????

DATAGRID_DELETEROW ... □□□□□

```
DATAGRID_DELETEROW(dataGrid, deleteRowNumber);
```

□□□□□□□□□□□□□□□□□□□□

```
DATAGRID_DELETEROW(dataGrid, 5);
```

□□□□□□□□□□□□□□□□□□□□

5□ 8□□□□□□□□

```
DATAGRID_DELETEROW(dataGrid, 5, 8);
```

https://go.documentation.sas.com/doc/jp/edmcddc/v_056/edmdatagrids/n0cx6kthm2pdkgn1l2zlad29nlel.htm



????????????

DATAGRID_GET

```
value = DATAGRID_GET(dataGrid, columnName, rowNum)
```

https://go.documentation.sas.com/doc/jp/edmcddc/v_056/edmdatagrids/n04ham6nlknk8ln17nuk76nue4vw.htm



??????

DATAGRID_SET

```
DATAGRID_SET(dataGrid, columnName, rowNumber, settingValue)
```

https://go.documentation.sas.com/doc/jp/edmcddc/v_056/edmdatagrids/p0danjcrv2wxtn1isg5kq69rcb2.htm

????????1????????

1

[illegible]

```
status = DATAGRID_FILTEREDGET(DebtEval, 'approvalStatus', 'riskGroup', 'EQ', 'Low')
```

https://go.documentation.sas.com/doc/jp/edmcdc/v_056/edmdatagrids/n1mwcqt8wn70gxn17vwqt1e2lgod.htm

?????????1?????????

1

```

DATAGRID_FILTEREDGETINDEX(dataGrid, columnName, filterColumnName, operator, filterValue)

/*   */
row_num = DATAGRID_FILTEREDGETINDEX(DebtEval, 'approvalStatus', 'riskGroup', 'EQ', 'Low')

```

https://go.documentation.sas.com/doc/jp/edmc/v_056/edmdatagrids/n15xvdgven63q0n1rnu3uktmf9cq.htm



???????

DATAGRID_COUNT

```
row_count = DATAGRID_COUNT(dataGrid);
```

https://go.documentation.sas.com/doc/jp/edmcddc/v_056/edmdatagrids/p0wg7r5h8ayh0bn173vtjch62vql.htm

■■■■■■■■

??????????

DATAGRID_SUM ... ■■■■■■■■■■

```
DATAGRID_SUM(dataGrid, column)

/* 例 */
payment_sum = DATAGRID_SUM(dataGrid, 'payment');
```

https://go.documentation.sas.com/doc/jp/edmcddc/v_056/edmdatagrids/p1du23931dz4tgn1vdf3ahx05qbe.htm

XXXXXXXX

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DATAGRID_MATCHCOUNT

```
row_count = DATAGRID_MATCHCOUNT(dataGrid, column_name, operator, match_value);

/*  */
row_count = DATAGRID_MATCHCOUNT(dataGrid, 'is_complete_flg', '=', 'Y');
```

XXXXXXXX

Operator	Description
EQ, =, ==	
NE, !=, ^=, <>	
GT, >	
LT, <	
LE, <=	
GE, >=	

https://go.documentation.sas.com/doc/jp/edmcdc/v_056/edmdatagrids/n1ic8wboejbzb6n11vltlxtnz2is.htm

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????????????

DATAGRID_SORT ... ■■■■■■■■■■

```
DATAGRID_SORT(sourceDataGrid, sortColumn, sortOrder, targetDataGrid)
```

sortOrder () ()

```
DATAGRID_ADDROW(dataGrid, 'column1', 'A', dataGridSorted);
```

https://go.documentation.sas.com/doc/jp/edmcddc/v_056/edmdatagrids/n08c59acvwpzx3n1pf4z22crgobo.htm



json????????????

DATAGRID_TOSTRING

```
str = DATAGRID_TOSTRING(dataGrid);
```

https://go.documentation.sas.com/doc/jp/edmcddc/v_056/edmdatagrids/n1d2o8h7l2hbxfn17wrmnkg2zulw.htm



??????????

DATAGRID_DUMPTOLOG

DATAGRID_DUMPTOLOG()

https://go.documentation.sas.com/doc/jp/edmcddc/v_056/edmdatagrids/p1da42svmyhzygn1r1f2uq10ntsh.htm



2??

DATAGRID_GRIDMATCHCOUNT

```
row_count = DATAGRID_GRIDMATCHCOUNT(dataGrid1, dataGrid2, column1, column2);  
row_count = DATAGRID_GRIDMATCHCOUNT(dataGrid1, dataGrid2, keyColumn);
```

https://go.documentation.sas.com/doc/jp/edmcddc/v_056/edmdatagrids/n1j3q1ssilim7qn16y4q1wwkje0x.htm

□□□□□□□□

2????????????????

DATAGRID_APPEND ... 2□□□□□□□□□□□□□□

DATAGRID_APPEND(dataGrid1, dataGrid2)

dataGrid2□□□□ dataGrid1□□□□□□

□□□□□□□□□□□□□□□□□□□□□□□□

rownum = DATAGRID_APPEND(dataGrid1, dataGrid2)

https://go.documentation.sas.com/doc/jp/edmcddc/v_056/edmdatagrids/n0plj4pbqiaxwnn1gzcgik62kxf7.htm

DS2??(???)

DS2 ()
??????????

LENGTH

```
val = length(str);
```

...

[https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n1lbye3jnh3aipn16jqgkbv4gnsg
.htm](https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n1lbye3jnh3aipn16jqgkbv4gnsg.htm)

DS2 ()

????????????????

FIND

```
pos = find(string, substring);  
pos = find(string, substring, startpos);
```

...

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n1v0tzf4xq363mn15mnppqtk2zti.htm

DS2 ()

????????????n????????

SCAN

```
str = scan(input_str, n, delimiter);
```

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/p13adatt2vvhcxn1ext6w6eet24p.htm

DS2??(???????)

DS2 ()
????????

SUBSTR

```
trimmed_str = substr(str, start_pos, length);
```

...

[https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/p0mce96o6y74fzn1ro3vtputzhu
t.htm](https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/p0mce96o6y74fzn1ro3vtputzhu
t.htm)

DS2 ()

????????

CAT

```
text = cat('aaa', 'bbb', 'ccc');
```

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n0somj6dsx2dmkn1vqjabhvt6nv4.htm

CATS

```
text = cats('aaa', 'bbb', 'ccc');
```

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n0h2zi3y876365n1bjrpv8seizpf.htm

CATX

```
text = catx(' ', 'aaa', 'bbb', 'ccc');
```

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n0dj69cad78xvgn19rbwpiyx9vmg.htm

DS2 ()

??????????

TRANWRD

```
str = tranwrd(inputstr, beforesubstr, after_substr);
```

...

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/p01iwnq51ps93bn1t9d1eztkx8go.htm

DS2 ()
??????????

LOWCASE

```
str = lowercase('INTRODUCTION');
```

...

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n0mwurvelifv54n18gbah5nmefn5.htm

DS2 ()

????URL???????

URLENCODE

```
text = urlencode(input_text);
```

[https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n10igvbm55geofn1esixotiud7t9.
htm](https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n10igvbm55geofn1esixotiud7t9.htm)

DS2??(?????)

DS2 ()

??, ?, ?????????????SAS????????

MDY

```
date_val = mdy(mm, dd, yy);
```

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n15zql58pd186n1djkzia6oprza.htm

DS2 ()

SAS????SAS???????

DATEPART

```
sas_date = DATEPART(sas_datetime);
```

[https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n16yabgppl3slnn1uh9ipw6qlrdo
.htm](https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n16yabgppl3slnn1uh9ipw6qlrdo.htm)

DS2 ()

??????????

DATETIME

```
sas_datetime = DATETIME();
```

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/p037ecmn1cv535n1op7wm4qnza7a.htm

DS2 ()

SAS????????????????

INTNX

INTNX(interval, target_value, increment)

```
/*  */
dcl double date_after6week having format yymmdd10.;
input_date = inputn('20250831', 'yymmdd8.');
```

date_after6week = intnx('week', input_date, 6); /* 6週間後の日付を計算する */

```
put date_after6week=; /* "2025/10/12"の日付を出力する */
```

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n1mtvizfg1y0g9n1wslqgjxseh0i.htm

DS2 ()

2??SAS??????????

INTCK

INTCK(interval, startDate, endDate, <>method)

```
proc ds2;
  data _null_;
    method run();
    dcl double startDate endDate mon day;

    startDate = inputn('2023/12/11', 'yymmdd10.');
    endDate = inputn('2025/12/01', 'yymmdd10.');

    mon = INTCK('MONTH', startDate, endDate, 'CONTINUOUS');
    put mon=;

    day = INTCK('DAY', startDate, endDate, 'CONTINUOUS');
    put day=;
  end;
enddata;
run;
quit;
```

interval

	DAY
	WEEK
	MONTH
	QTR
	YEAR
	SECOND
	MINUTE

変数名	変数型
変数名	HOUR

method

変数型	変数型
CONTINUOUS, C, CONT	変数型
DISCRETE, D, DISC	変数型 DISCRETE 変数型 (変数型) 変数型

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/ds2ref/n096g3nwx05g7wn161ax2rdqm1fn.htm

DS2????CAS??????????

table.loadTable????

```
proc cas;
  session casauto;
  table.loadTable /
    sourceCaslib = "mylib" /* ??? caslib ??? */
  , path = "inputdata.sas7bdat"
  , casout = {
    caslib = "public"
    , name = "target_table_name"
    , replace = true
  };
run;
quit;
```

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/caspg/cas-table-loadtable.htm

CAS????????????????????????????????

table.promote□□□□

```
proc cas;
  session casauto;
  table.promote /
    sourceCaslib = "mylib" /* □□□ caslib □□□ */
    , name = "table_name"
    , targetCaslib = "public"
    , target = "target_table_name"
    , quiet = false
  ;
run;
quit;
```

https://documentation.sas.com/doc/ja/pgmsascdc/v_061/caspg/cas-table-promote.htm

Intelligent Decisioning

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sas.referencedata.activation.activateGlobalVariableOnImport ☐

https://go.documentation.sas.com/doc/jp/edmcdd/v_056/edmag/n18wqmqx6oses9n1rgxsb2hdtddl.htm#p0gy0cgi56mr34n1tlaev51z8gzv

SAS Studio?DS2???????????????

□□□□□□□□

`${PACKAGE_NAME}` □□□□

DS2□□□□□□□□□□

`proc ds2; □ end;` □□□□

https://go.documentation.sas.com/doc/ja/edmcdd/v_056/edmgug/n10dh0jke5q5uvn1kp4wcrbqypkl.htm#n0jxmwswjlvwvn1kath1xin4pcl

□□□□

```
proc ds2;
  package "${PACKAGE_NAME}" /inline;
  method execute(/* □□□□□ □ */);
    /* □□□□ □ */
  end;
endpackage;
run;
quit;
```

□□□□

```
proc ds2;
  package "testCustomCode" /overwrite=yes;
  method execute(/* □□□□□ □ */);
    /* □□□□ □ */
  end;
endpackage;
run;
quit;
```