

# Encrypt

(1) Data Columns Encrypt;

```
DATA CARS;  
SET SASHELP.CARS(OBS=10);  
STRING = COLLATE(0, 255);  
HIGH4 = REVERSE(STRING);  
KEEP MAKE MODEL MSRP STRING HIGH4;  
RUN;  
  
DATA CARS1;  
SET CARS;  
ENCRYPT = TRANSLATE(MODEL, HIGH4, STRING);  
DECRYPT = TRANSLATE(ENCRYPT, STRING, HIGH4);  
RUN;  
  
PROC PRINT DATA = CARS1;  
VAR MODEL DECRYPT;  
RUN;
```

SAS Connection established. Subprocess id is 26404

**The SAS System**

Obs	Model	DECRYPT
1	MDX	MDX
2	RSX Type S 2dr	RSX Type S 2dr
3	TSX 4dr	TSX 4dr
4	TL 4dr	TL 4dr
5	3.5 RL 4dr	3.5 RL 4dr
6	3.5 RL w/Navigation 4dr	3.5 RL w/Navigation 4dr
7	NSX coupe 2dr manual S	NSX coupe 2dr manual S
8	A4 1.8T 4dr	A4 1.8T 4dr
9	A4 1.8T convertible 2dr	A4 1.8T convertible 2dr
10	A4 3.0 4dr	A4 3.0 4dr

```
PROC PRINT DATA = CARS1;
RUN;
```

---

```

58 ods listing close;ods html5 (id=saspy_internal) file=stdout
options(bitmap_mode='inline') device=svg style=HTMLBlue; ods
58 ! graphics on / outputfmt=png;
NOTE: Writing HTML5(SASPY_INTERNAL) Body file: STDOUT
59
60 PROC PRINT DATA = CARS1;
61 RUN;
ERROR: Invalid characters were present in the data.
ERROR: An error occurred while processing text data.
NOTE: The SAS System stopped processing this step because of errors.
NOTE: There were 10 observations read from the data set WORK.CARS1.
NOTE: PROCEDURE PRINT used (Total process time):
      real time          0.00 seconds
      cpu time           0.01 seconds

62
63 ods html5 (id=saspy_internal) close;ods listing;

64

```

### The SAS System

Obs	Make	Model	MSRP	STRING	HIGH4	ENCRYPT	DECRYPT
1	Acura	MDX	\$36,945				

(2) Data Macro Encrypt;

```

/* ENCRYPT */
LIBNAME MPOC "macro/";
OPTION MSTORED SASMSTORE = MPOC;

%MACRO STRA_CAL()/STORE SECURE;
    %PUT 1;
%MEND STRA_CAL;
%STRA_CAL();

```

```

66 ods listing close;ods html5 (id=saspy_internal) file=stdout
options(bitmap_mode='inline') device=svg style=HTMLBlue; ods
66 ! graphics on / outputfmt=png;
NOTE: Writing HTML5(SASPY_INTERNAL) Body file: STDOUT
67
68 /* ENCRYPT */
69 LIBNAME MPOC "macro/";
NOTE: Libref MPOC was successfully assigned as follows:
      Engine:          V9
      Physical Name: /folders/myfolders/SASData/macro
70 OPTION MSTORED SASMSTORE = MPOC;
71
72 %MACRO STRA_CAL()/STORE SECURE;
73     %PUT 1;
74 %MEND STRA_CAL;
75 %STRA_CAL();
1
76
77
78 ods html5 (id=saspy_internal) close;ods listing;
79

```

#### HOW TO USE:

```

/* DECRYPT */
LIBNAME MPOC "macro/";
OPTION MSTORED SASMSTORE = MPOC;

%STRA_CAL();

```

#### (3) Data Set Encrypt;

```

DATA S_A(ENCRYPT=YES PW=Q1W2E3R4);
SET SASHELP.CARS;
RUN;

```

---

```
81  ods listing close;ods html5 (id=saspy_internal) file=stdout
options(bitmap_mode='inline') device=svg style=HTMLBlue; ods
81 ! graphics on / outputfmt=png;
NOTE: Writing HTML5(SASPY_INTERNAL) Body file: STDOUT
82
83  DATA S_A(ENCRYPT=YES PW=XXXXXXXX);
84  SET SASHELP.CARS;
85  RUN;
NOTE: There were 428 observations read from the data set SASHELP.CARS.
NOTE: The data set WORK.S_A has 428 observations and 15 variables.
NOTE: DATA statement used (Total process time):
      real time           0.00 seconds
      cpu time            0.00 seconds

86
87  ods html5 (id=saspy_internal) close;ods listing;

88
```

```
/* READ */
PROC PRINT DATA = S_A;
RUN;

/* ALTER */
PROC DELETE DATA = S_A;
RUN;
```

---

```

90  ods listing close;ods html5 (id=saspy_internal) file=stdout
options(bitmap_mode='inline') device=svg style=HTMLBlue; ods
90 ! graphics on / outputfmt=png;
NOTE: Writing HTML5(SASPY_INTERNAL) Body file: STDOUT
91
92  /* READ */
93  PROC PRINT DATA = S_A;
ERROR: Invalid or missing READ password on member WORK.S_A.DATA.
94  RUN;
NOTE: The SAS System stopped processing this step because of errors.
NOTE: PROCEDURE PRINT used (Total process time):
      real time          0.00 seconds
      cpu time           0.00 seconds

95
96  /* ALTER */
97  PROC DELETE DATA = S_A;
98  RUN;
ERROR: Invalid or missing ALTER password on member WORK.S_A.DATA.
NOTE: The SAS System stopped processing this step because of errors.
NOTE: PROCEDURE DELETE used (Total process time):
      real time          0.00 seconds
      cpu time           0.00 seconds

99
100
101  ods html5 (id=saspy_internal) close;ods listing;

102

```

```

DATA S_B;
SET S_A(PW=Q1W2E3R4);
RUN;

PROC PRINT DATA = S_B(OBS=1);
VAR MAKE;
RUN;

PROC DELETE DATA = S_B;
RUN;

```

Obs	Make
1	Acura

...