

Using Explicit Array to Create Dummy Variables from Categorical Variable in SAS¹

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** dichot.sas ;
title 'Dichot.sas, Create dummy variables with explicit array' ;
** First I will read data into a variable "relig" ;
** the "@" tells SAS to stay on the same line and in the same ;
** column after a variable is read ;
data one ; input relig @@ ;
datalines ;
1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5
;
data two ; set one ;
** I will now use an explicit array to create dictomous variables ;
** from this categorical variable. I know that there are five ;
** categories. I start an explicit array. ;
** The array's name is "dumvar", and there are five "elements" ;
** in the array. With the following line, I create five variables;
** They are: catholic protstnt jewish moslem buddhst ;
array dumvar{5} catholic protstnt jewish moslem buddhst ;
** I start a do loop. The values of "i" will range from 1 to five ;
do i = 1 to 5 ;
** With the next line, I set the value of the new variables to 0 ;
if dumvar{i} = . then dumvar{i} = 0 ;
** Next, change the value of the new variables to 1 if "relig" is the ;
** same value as "i" ;
if relig = i then dumvar{i} = 1 ;
end ;
proc sort; by relig ;
proc print ; run ;

```

Dichot.sas, Create dummy variables with explicit array

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Obs	relig	catholic	protstnt	jewish	moslem	buddhst	i
1	1	1	0	0	0	0	6
2	1	1	0	0	0	0	6
3	1	1	0	0	0	0	6
4	1	1	0	0	0	0	6
5	1	1	0	0	0	0	6
6	1	1	0	0	0	0	6
7	2	0	1	0	0	0	6
8	2	0	1	0	0	0	6
9	2	0	1	0	0	0	6
10	2	0	1	0	0	0	6
11	2	0	1	0	0	0	6
12	2	0	1	0	0	0	6
13	3	0	0	1	0	0	6
14	3	0	0	1	0	0	6
15	3	0	0	1	0	0	6
16	3	0	0	1	0	0	6
17	3	0	0	1	0	0	6
18	3	0	0	1	0	0	6
19	4	0	0	0	1	0	6
20	4	0	0	0	1	0	6
21	4	0	0	0	1	0	6
22	4	0	0	0	1	0	6
23	4	0	0	0	1	0	6
24	4	0	0	0	1	0	6
25	5	0	0	0	0	1	6
26	5	0	0	0	0	1	6
27	5	0	0	0	0	1	6
28	5	0	0	0	0	1	6
29	5	0	0	0	0	1	6
30	5	0	0	0	0	1	6