

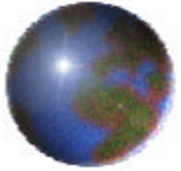


TESTING TRAPS

Creating good test data 101

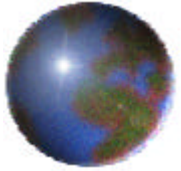
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TOPICS

- the basic principles of testing
- test data for character variables
- test data for numeric variables
- test data for IF conditions
- testing scenarios where fields are related
- generating random test data



Test data input for character variables

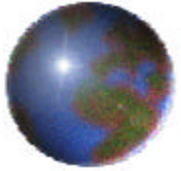
Output field definitions:

Field1 \$2.

Field2 \$15.

Common input data:

Field1	Field2
X	X



Test data input for character variables

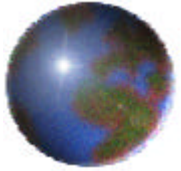
Output field definitions:

Field1 \$2.

Field2 \$15.

Better input data:

Field1	Field2
AB	AXXXXXXXXXXXXXXZ
blank / null	blank / null



Test data input for numeric variables

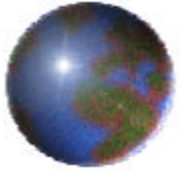
Output field definitions:

Field1 2.

Field2 10.5

Common input data:

Field1	Field2
1	2



Test data input for numeric variables

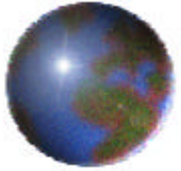
Output field definitions:

Field1 2.

Field2 10.5

Better input data:

Field1	Field2
10	1234567890.12345
-11	-256.54321
. (missing)	. (missing)



Testing IF conditions

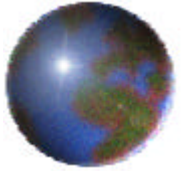
```
IF type_code in (10,35,50)
```

```
    THEN ...
```

```
    ELSE ...
```

Input data:

type_code
10
35
36
50
99



Testing related field scenarios

Field Combinations:

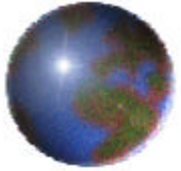
Test related field combinations, both valid and invalid

Field1	Field2	Condition:
A	B	Valid
A	C	Invalid
2	3	Valid
2	10	Invalid



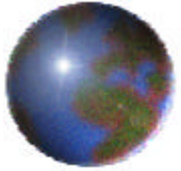
Random data generation

```
data test;  
  length char_field $8;  
  do loop1 = 1 to 2;  
    do loop2 = 1 to 2;  
      random1 = ranuni(5);  
      random2 = int(random1*100);  
      char_field = repeat(byte(int(random1*26)+65),  
                          ceil(ranuni(1)*7));  
      output;  
    end;  
  end;  
run;
```



Random data generation output

char_field	loop1	loop2	random1	random2
YYYYYYY	1	1	0.9248128491	92
ZZZZ	1	2	0.9991215304	99
PPPPPPP	2	1	0.6080128893	60
SSSSSS	2	2	0.7148958657	71



THANK YOU !

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