

Stump the Programmer #52 – Format Error

By Art Carpenter

Problem suggested by Justina Flavin.

Relative to the ABC. format, under what conditions will the data set WORK.A be created?

If the format ABC. does not exist:

Can the data set be created?

Can the DATA step be executed without error?

```
data a;  
x=1;  
format x abc.;  
run;
```

Stump the Programmer #53 – First Character

By Art Carpenter

In the following DATA step, the three variables A1, A2, and A3 are created successfully and each contains the first letter, 'F', of the variable NAME. What is the length assigned to each of these three new variables?

```
data one;  
name= 'Fred' ;  
  
a1 = substr(name,1,1);  
a2 = first(name);  
substr(a3,1,1) = name;  
run;
```

Solution

Each of the variables contain the letter 'F', however each has a different length.

	Length	Result
A1	4	The SUBSTR function uses the length of the incoming variable.
A2	1	The FIRST function always returns a length of 1.
A3	8	A3 is established using the default length for a character variable

Stump the Programmer #54 – A Silly DO Loop

By Art Carpenter

In the following DO loop the loop index (AGE) is to be incremented from -2 to -6 by 1. The programmer has meant to increment by -1, but forgot the minus sign. The step executes without error. How many times does the loop execute and what values are taken on by AGE?

```
data silly;
  do age = -2 to age=-6 by 1;
    put age=;
  end;
run;
```

Stump the Programmer #55 – INFORMAT Length

By Art Carpenter

Problem suggested by Justina Flavin.

The following DATA step correctly reads the data using INFORMATs on the INPUT statement (known as 'formatted input').

```
data sales1;
  infile datalines;
  input @1 Number 3.
        @4 SellDate mmdyy10.
        @14 Company $3.;
  format selldate date9.;
datalines;
10007/20/2006ABC
20009/21/2005DEF
50010/10/2006GHI
run;
```

Instead of writing the informats on the INPUT statement, we might be tempted to use the INFORMAT statement to specify the formats. This does not work as anticipated. How does it fail and why? Which variables will have missing values?

- * Using an INFORMAT statement;
- * This does not work.
- * Which variables will be missing and why?;

```
data sales2;
  informat number 3.
           selldate mmddyy10.
           company $3.;
  infile datalines;
  input @1 Number
        @4 SellDate
        @14 Company ;
  format selldate date9.;
datalines;
10007/20/2006ABC
20009/21/2005DEF
50010/10/2006GHI
run;
```
