Print

Quiz, Lesson 8: Using SAS Arrays

Your Score: 100%

Congratulations! Your score of 100% indicates that you've mastered the topics in this lesson. If you'd like, you can review the feedback for each question.

When you're ready to start the next lesson, exit this lesson and begin the next one.

1. Which statement is false regarding an ARRAY statement?

   a. It is an executable statement.
   b. It can be used to create variables.
   c. It must contain either all numeric or all character elements.
   d. It must be used to define an array before the array name can be referenced.

Your answer: a
Correct answer: a

An ARRAY statement is not an executable statement; it merely defines an array.

Review: What Is a SAS Array?

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2. What belongs within the braces of this ARRAY statement?

```
array contrib{?} qtr1-qtr4;
```

   a. `quarter`
   b. `quarter*`
   c. `1-4`
   d. `4`

Your answer: d
Correct answer: d

The value in the braces indicates the number of elements in the array. In this case, there are four elements.

Review: Defining a SAS Array

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3. Which of the following ARRAY statements is correct?

   a. `array grades{*} Q1 Q4 Q7 Q8 Q12 Q15;`
   b. `array sites{3} $10;`
   c. `array trials{*} _numeric_;`
   d. `array exp{5} _temporary_ (93 85 77 69 61);`
   e. All of the above

Your answer: e
Correct answer: e

All of these ARRAY statements are correct.

Review: Defining a SAS Array, Specifying the Array Dimension, Specifying the Array Elements

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4. What does the following ARRAY statement do?

```
array seed{*} _character_;
```

a. This statement creates a temporary array of character variables.
b. This statement creates an array of all previously defined character variables in the DATA step.
c. Nothing. This is not an accurate ARRAY statement.

Your answer: b
Correct answer: b

An ARRAY statement with the keyword _CHARACTER_ creates an array of all previously defined character variables in the DATA step.

Review: Specifying the Array Dimension

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5. For the program below, select the interative DO statement that processes all elements in the **contrib** array.

```
data work.contrib;
   array contrib{4} qtr1-qtr4;

   _____________
      contrib{i}=contrib{i}*1.25;
   end;
run;
```

a. `do i=4;`
b. `do i=1 to 4;`
c. `do until i=4;`
d. `do while i le 4;`

Your answer: b
Correct answer: b

In the DO statement, you specify the index variable that represents the values of the array elements. Then specify the start and stop positions of the array elements.

Review: Using a DO Loop to Reference Elements in an Array

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6. What is the value of the index variable that references **Jul** in the statements below?

```
array quarter{4} Jan Apr Jul Oct;
```

```
do i=1 to 4;
   yeargoal=quarter{i}*1.2;
end;
```

a. 1
b. 2
c. 3
d. 4

Your answer: c
Correct answer: c

The index value represents the position of the array element. In this case, the third element is **Jul**.

Review: Using a DO Loop to Reference Elements in an Array

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7. Which statement below is **false** regarding the use of arrays to create variables?

a. The variables are added to the program data vector during the compilation of the DATA step.
b. You do not need to specify the array elements in the ARRAY statement.
c. By default, all character variables are assigned a length of eight.
d. Only character variables can be created.

Your answer: d
Correct answer: d

Either numeric or character variables can be created.

Review: Using an Array to Create Variables, Using Arrays to Perform Calculations

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8. Which of these data sets could be described as a narrow data set?

work.a

ID	Qtr1	Qtr2	Qtr3	Qtr4
120001	.	.	.	25
120002	15	15	15	15

work.b

ID	Period	Amount
12001	Qtr4	25
12002	Qtr1	15
12002	Qtr2	15
12002	Qtr3	15
12002	Qtr4	15

a. **work.a**
b. **work.b**

Your answer: b
Correct answer: b

Narrow data sets typically have multiple observations, with a small amount of data per entity. A narrow data set might or might not contain missing values.

Review: Why Restructure a Data Set?

9. Which data set is more appropriate for using PROC FREQ to determine the number of donations made in each of the four quarters?

work.a

ID	Qtr1	Qtr2	Qtr3	Qtr4
120001	.	.	.	25
120002	15	15	15	15

work.b

ID	Period	Amount
12001	Qtr4	25
12002	Qtr1	15
12002	Qtr2	15
12002	Qtr3	15
12002	Qtr4	15

a. **work.a**
b. **work.b**

Your answer: b
Correct answer: b

The narrow data set contains a separate observation for each non-missing quarterly contribution. This enables you to use a simple TABLES statement to calculate the frequency of each value for **Period**.

Review: Why Restructure a Data Set?

10. When using an array to restructure the data, how many array elements would you use if you wanted **work.a** to look like **work.b**?

work.a

ID	Qtr1	Qtr2	Qtr3	Qtr4
120001	.	.	.	25
120002	15	15	15	15

work.b

ID	Period	Amount
12001	Qtr4	25
12002	Qtr1	15
12002	Qtr2	15
12002	Qtr3	15
12002	Qtr4	15

a. 1
b. 3
c. 4
d. 5

Your answer: c
Correct answer: c

You would use one array element for each variable **Qtr1-Qtr4**.

Review: Restructuring a SAS Data Set with a DATA Step

Close