*Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Score \_\_\_\_\_\_\_\_\_\_\_/40*

*Select the best answer for each question and there are 10 extra point questions on topics not yet covered in lecture.*

1. A raw data file is listed below. ( Extra Point)

|  |
| --- |
| 1---+---**-**10---+----20---+--- |
| 01/05/1989    Frank     11 |
| 12/25/1987    June      13 |
| 01/05/1991    Sally     9 |

The following SAS program is submitted using this file as input:

data work.family;

infile *'file-specification'*;

input @1 date\_of\_birth mmddyy10.

@15 first\_name $5.

@25 age 3;

run;

proc print data=work.family noobs;

run;

The following output is generated for the **Work.Family** data set:

| **Date\_of\_birth** | **First\_name** | **Age** |
| --- | --- | --- |
| 10597 | Frank | . |
| 10220 | June | . |
| 11327 | Sally | . |

Which of the following statements is true regarding the **Work.Family** output?

|  |  |  |
| --- | --- | --- |
|  | *a.* | The output has the expected data values. |
|  | *b.* | The output does not have the expected data values due to an invalid data set name. |
|  | *c.* | The output does not have the expected data values due to an invalid informat for Age only. |
|  | *d.* | The output does not have the expected data values due to invalid informats for both Age and Date\_of\_birth. |

1. The following SAS program is submitted (Extra Point):

data employees;

infile *'file-specification'*;

input @1 name $10.

@15 date date9

@25 department $;

run;

How many numeric variables are created?

|  |  |  |
| --- | --- | --- |
|  | *a.* | 0 |
|  | *b.* | 1 |
|  | *c.* | 2 |
|  | *d.* | 3 |

1. What is the function of the FILENAME statement in SAS?

|  |  |  |
| --- | --- | --- |
|  | *a.* | It associates a file reference with an external file. |
|  | *b.* | It associates a library reference with an external file. |
|  | *c.* | It associates a file reference with a relational database. |
|  | *d.* | It associates a library reference with a relational database. |

1. A raw data file is listed below.

|  |
| --- |
| 1---+---**-**10---+----20---+--- |
| Jose,47,210 |
| Sue,,108 |

The following SAS program is submitted using this file as input:

data employeestats;

<*insert INFILE statement here*>;

input name $ age weight;

run;

The following output is desired:

| **name** | **age** | **weight** |
| --- | --- | --- |
| Jose | 47 | 210 |
| Sue | . | 108 |

Which of the following INFILE statements completes the program and accesses the data correctly?

|  |  |  |
| --- | --- | --- |
|  | *a.* | infile '*file-specification*' pad; |
|  | *b.* | infile '*file-specification*' dsd; |
|  | *c.* | infile '*file-specification'* missover; |
|  | *d.* | infile '*file-specification*' dlm=','; |

1. A raw data file is listed below.

|  |
| --- |
| 1---+---**-**10---+----20---+--- |
| RANCH,1250,10MAR2004 |
| SPLIT,1190,10/20/2004 |
| CONDO,1400,17JUN2004 |
| TWOSTORY,1810,12/31/2004 |
| RANCH,1500,20JAN2004 |
| SPLIT,1615,08/19/2004 |

The following SAS program is submitted using this file as input:

data work.condo\_ranch;

infile '*file-specification*' dsd;

input style $ @;

if style = 'CONDO' or style = 'RANCH' then

input sqfeet saledate : date9.;

else input sqfeet saledate : mmddyy10.;

run;

How many observations does the **Work.Condo\_ranch** data set contain?

|  |  |  |
| --- | --- | --- |
|  | *a.* | 0 |
|  | *b.* | 3 |
|  | *c.* | 5 |
|  | *d.* | 6 |

1. The following SAS program is submitted:

data both;

set M F(in = INF);

if INF then gen = 'F';

else gen = 'M';

by name;

run;

The SAS data sets **Work.M** and **Work.F** are each sorted by the variable Name. The data set **Work.M** contains 10 observations, and the data set **Work.F** contains 9 observations. How many observations does the **Work.Both** data set contain?

|  |  |  |
| --- | --- | --- |
|  | *a.* | 0 |
|  | *b.* | 9 |
|  | *c.* | 10 |
|  | *d.* | 19 |

1. The following SAS program is submitted:

data test(drop=age);

set sashelp.class(keep=name age gender

height weight);

drop=gender;

newage=age+1;

run;

**Sashelp.Class** contains 5 variables. What is the result?

|  |  |  |
| --- | --- | --- |
|  | *a.* | No variables are written to the data set **Work.Test**. |
|  | *b.* | 4 variables are written to the data set **Work.Test**. |
|  | *c.* | 5 variables are written to the data set **Work.Test**. |
|  | *d.* | 6 variables are written to the data set **Work.Test**. |

1. The following SAS program is submitted at the start of a new SAS session:

libname sasdata *'SAS-data-library'*;

data sasdata.sales;

set sasdata.salesdata;

profit=expenses-revenues;

run;

proc print data=sales;

run;

The SAS data set **Sasdata.Salesdata** has 10 observations. Which one of the following answers explains why a report fails to generate?

|  |  |  |
| --- | --- | --- |
|  | *a.* | The DATA step fails to execute. |
|  | *b.* | The SAS data set **Sales** does not exist. |
|  | *c.* | The SAS data set **Sales** has no observations. |
|  | *d.* | The PRINT procedure statement syntax is incorrect. |

1. The SAS data set **Sasdata.Two** is listed below.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sasdata.Two**   | **x** | **y** | | --- | --- | | 5 | 2 | | 5 | 4 | | 3 | 6 | |

The following SAS program is submitted:

data sasuser.one one;

set sasdata.two;

output one;

run;

What is the result?

|  |  |  |
| --- | --- | --- |
|  | *a.* | The data set **Sasuser.One** has 0 observations and the data set **One** has 0 observations. |
|  | *b.* | The data set **Sasuser.One** has 0 observations and the data set **One** has 3 observations. |
|  | *c.* | The data set **Sasuser.One** has 3 observations and the data set **One** has 0 observations. |
|  | *d.* | The data set **Sasuser.One** has 3 observations and the data set **One** has 3 observations. |

1. The following SAS program is submitted:

data work.report;

set work.sales\_info;

if qtr(sales\_date) ge 3;

run;

The SAS data set **Work.Sales\_info** has one observation for each month in the year 2005, and the variable Sales\_Date contains a SAS date value for each of the 12 months. How many of the original 12 observations in **Work.Sales\_info** are written to the **Work.Report** data set?

|  |  |  |
| --- | --- | --- |
|  | *a.* | 2 |
|  | *b.* | 3 |
|  | *c.* | 6 |
|  | *d.* | 9 |

1. The following SAS program is submitted:

data \_null\_;

set old(keep=sales1 sales2);

file '*file-specification*';

put sales1 sales2;

run;

What is the result?

|  |  |  |
| --- | --- | --- |
|  | *a.* | A raw data file is created with no delimiter separating the fields. |
|  | *b.* | A raw data file is created with a space delimiter separating the fields. |
|  | *c.* | A raw data file is created with a comma delimiter separating the fields. |
|  | *d.* | No raw data file is created. The DATA step fails execution because no delimiter is specified. |

1. The following SAS program is submitted:

data \_null\_;

set old <*insert option here*> = last;

put sales1 sales2;

if last then put 'This is the end of the data set';

run;

Which of the following options creates the variable Last?

|  |  |  |
| --- | --- | --- |
|  | *a.* | END |
|  | *b.* | EOF |
|  | *c.* | PTOBS |
|  | *d.* | TOTOBS |
|  |  |  |

1. The SAS data set **One** is listed below.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **One**   | **X** | **Y** | **Z** | | --- | --- | --- | | 1 | A | 27 | | 1 | A | 33 | | 1 | B | 45 | | 2 | A | 52 | | 2 | B | 69 | | 3 | B | 70 | | 4 | A | 82 | | 4 | C | 91 | |

The following SAS program is submitted:

data two;

set one;

by x;

if first.x;

run;

proc print data=two noobs;

run;

Which of the following reports is the result?

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | *a.* | | **X** | **Y** | **Z** | | --- | --- | --- | | 1 | A | 27 | | 2 | A | 52 | | 3 | B | 70 | | 4 | A | 82 | |
|  | *b.* | | **X** | **Y** | **Z** | | --- | --- | --- | | 1 | A | 27 | | 1 | B | 45 | | 2 | A | 52 | | 2 | B | 69 | | 3 | B | 70 | | 4 | A | 82 | | 4 | C | 91 | |
|  | *c.* | | **X** | **Y** | **Z** | | --- | --- | --- | | 1 | B | 45 | | 2 | B | 69 | | 3 | B | 70 | | 4 | C | 91 | |
|  | *d.* | No report is produced. The PRINT procedure fails because the data set **Two** is not created in the DATA step. |

1. The following SAS program is submitted:

libname sasdata '*SAS-data-library*';

libname labdata '*SAS-data-library*';

data labdata.boston

labdata.dallas(drop=city dest equipment);

set sasdata.cities(keep=orig dest city

price equipment);

if dest='BOS' then output labdata.boston;

else if dest='DFW' then output labdata.dallas;

run;

Which variables are output to both data sets?

|  |  |  |
| --- | --- | --- |
|  | *a.* | Price and Orig only |
|  | *b.* | City and Equipment only |
|  | *c.* | City, Price, and Equipment only |
|  | *d.* | City, Price, Orig, and Equipment only |

1. The following SAS program is submitted:

proc contents data=sasuser.airplanes;

run;

What is produced as output?

|  |  |  |
| --- | --- | --- |
|  | *a.* | the code that created the data set **Sasuser.Airplanes** |
|  | *b.* | the data portion only of the data set **Sasuser.Airplanes** |
|  | *c.* | the descriptor portion only of the data set **Sasuser.Airplanes** |
|  | *d.* | the data and descriptor portions of the data set **Sasuser.Airplanes** |

1. Which SAS procedure displays a listing of the observations in the data portion of a SAS data set?

|  |  |  |
| --- | --- | --- |
|  | *a.* | FSLIST |
|  | *b.* | REPORT |
|  | *c.* | TABULATE |
|  | *d.* | CONTENTS |

1. The observations in the SAS data set **Work.Test** are ordered by the values of the variable Salary. The following SAS program is submitted:

proc sort data=work.test;

<*insert statement here*>

run;

Which of the following statements completes the program and sorts the **Work.Test** data set by Name in descending order?

|  |  |  |
| --- | --- | --- |
|  | *a.* | by desc name; |
|  | *b.* | by name desc; |
|  | *c.* | by descending name; |
|  | *d.* | by name descending; |

1. The following SAS program is submitted:

proc sort data=payroll;

by EmployeeIDNumber;

run;

How are the observations sorted?

|  |  |  |
| --- | --- | --- |
|  | *a.* | **Payroll** is re-created in sorted order by EmployeeIDNumber. |
|  | *b.* | **Payroll** is stored in original order, and a new data set **Payroll** is created in sorted order by EmployeeIDNumber. |
|  | *c.* | **Payroll** is stored in original order, and a new data set **Payrollsorted** is created in sorted order by EmployeeIDNumber. |
|  | *d.* | **Payroll** is re-created in sorted order by EmployeeIDNumber, and a new data set **Payroll** is created in sorted order by EmployeeIDNumber. |

1. Which one of the following SAS programs creates a variable named City with a value of *Chicago*?

|  |  |  |
| --- | --- | --- |
|  | *a.* | data work.airports;  AirportCode='ord';  if AirportCode='ORD' City='Chicago';  run; |
|  | *b.* | data work.airports;  AirportCode='ORD';  if AirportCode='ORD' City='Chicago';  run; |
|  | *c.* | data work.airports;  AirportCode='ORD';  if AirportCode='ORD' then City='Chicago';  run; |
|  | *d.* | data work.airports;  AirportCode='ORD';  if AirportCode='ORD';  then City='Chicago';  run; |

1. The SAS data set **Employees** is listed below.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Employees**   | **Name** | **Salary** | | --- | --- | | Patel | 60000 | | Payne | 50000 | | Ellis | 55000 | | Liu | 45000 | |

The following SAS program is submitted:

proc print data=employees;

where name ? 'e';

run;

What is the result?

|  |  |  |
| --- | --- | --- |
|  | *a.* | No observations are written to the report. |
|  | *b.* | The observation for *Ellis* only is written to the report. |
|  | *c.* | The observations for *Patel* and *Payne* only are written to the report. |
|  | *d.* | The observations for *Patel*, *Payne*, and *Ellis* only are written to the report. |

1. The following SAS program is submitted:

data work.count;

if OriginalAmount= . then

OriginalAmount=100;

AdditionalItems=100;

OriginalAmount= .;

TotalCount=(OriginalAmount+AdditionalItems)+0;

run;

What is the value of the Totalcount variable in the output data set?

|  |  |  |
| --- | --- | --- |
|  | *a.* | *0* |
|  | *b.* | *100* |
|  | *c.* | *200* |
|  | *d.* | **.** (missing numeric value) |

1. Which SAS program renames two variables?

|  |  |  |
| --- | --- | --- |
|  | *a.* | set work.dept1  work.dept2(rename=(jcode=jobcode)  (sal=salary)); |
|  | *b.* | set work.dept1  work.dept2(rename=(jcode=jobcode  sal=salary)); |
|  | *c.* | set work.dept1  work.dept2 rename=(jcode=jobcode  sal=salary); |
|  | *d.* | set work.dept1  work.dept rename=jcode=jobcode  sal=salary; |

1. What is true of the sum statement in a SAS DATA step program?

|  |  |  |
| --- | --- | --- |
|  | *a.* | It is valid only in conjunction with a SUM function. |
|  | *b.* | It is not valid with the SET, MERGE, and UPDATE statements. |
|  | *c.* | It adds the value of an expression to an accumulator variable and ignores missing values. |
|  | *d.* | It does not retain the accumulator variable value from one iteration of the SAS DATA step to the next. |

1. What is the correct form of the sum statement in a DATA step?

|  |  |  |
| --- | --- | --- |
|  | *a.* | sum var1 var2; |
|  | *b.* | var1 + var2; |
|  | *c.* | total=var1 + var2; |
|  | *d.* | total=sum(var1,var2); |

1. The following SAS program is submitted(Extra Point)

data work.month;

date=put('13mar2000'd,ddmmyy10.);

run;

What are the type and length of the variable Date in the output data set?

|  |  |  |
| --- | --- | --- |
|  | *a.* | The type is numeric and the length is 8 bytes. |
|  | *b.* | The type is numeric and the length is 10 bytes. |
|  | *c.* | The type is character and the length is 8 bytes. |
|  | *d.* | The type is character and the length is 10 bytes. |

1. A SAS program is submitted and the following is written to the SAS log:

|  |  |
| --- | --- |
| SAS Log   |  | | --- | | 178 data days; 179 do i='SUN' 'MON' 'TUES';  ----- ------  388 200  ERROR 388-185: Expecting an arithmetic operator.  ERROR 300-322: The symbol is not recognized and  will be ignored.  180 day=i!!'DAY';  181 end;  182 run; | |

What caused the error?

|  |  |  |
| --- | --- | --- |
|  | *a.* | The list of values should be in parentheses. |
|  | *b.* | The values should be separated by commas. |
|  | *c.* | The values should not be in quotation marks. |
|  | *d.* | Character values are not allowed on a DO loop statement. |

1. The following SAS program is submitted:

data work.clients;

calls=6;

do while(calls le 6);

calls+1;

end;

calls+1;

run;

What is the result?

|  |  |  |
| --- | --- | --- |
|  | *a.* | The variable Calls has a value of *6* in the output data set. |
|  | *b.* | The variable Calls has a value of *7* in the output data set. |
|  | *c.* | The variable Calls has a value of *8* in the output data set. |
|  | *d.* | The variable Calls has no value. The program fails to execute. |

1. The following SAS program is submitted:

data stats;

set revenue;

array weekly{5} mon tue wed thu fri;

<*insert DO statement here*>

total=weekly{i}\*.25;

output;

end;

run;

Which one of the following DO statements completes the program and processes the elements of the weekly array?

|  |  |  |
| --- | --- | --- |
|  | *a.* | do i=1-5; |
|  | *b.* | do i=1 to 5; |
|  | *c.* | do weekly=1 to 5; |
|  | *d.* | do weekly{i}=1 to 5; |

1. The following program is submitted: (Extra Point)

data work.test;

array diff\_sales{3};

run;

Which of the variables are written to the **Work.Test** data set?

|  |  |  |
| --- | --- | --- |
|  | *a.* | Diff\_sales only |
|  | *b.* | Diff\_sales3 only |
|  | *c.* | Diff\_sales, Diff\_sales1, Diff\_sales2 |
|  | *d.* | Diff\_sales1, Diff\_sales2, Diff\_sales3 |

1. The following SAS program is submitted(Extra Point)

proc report data=work.houses nowd;

column style price;

where price<100000;

<*insert DEFINE statement(s) here*>

title;

run;

The following list report is generated:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | Style of homes | Asking price | |  | | | CONDO | $80,050 | |  | $79,350 | |  | $55,850 | | TWOSTORY | $69,250 | |

Which of the following DEFINE statements completes the program and produces the desired output?

|  |  |  |
| --- | --- | --- |
|  | *a.* | define price/sum format=dollar9. width=10; |
|  | *b.* | define style/display width=9.;  define price/sum format=dollar9. width=10; |
|  | *c.* | define style/group width=9;  define price/sum format=dollar9. width=10; |
|  | *d.* | define style/order width=9;  define price/sum format=dollar9. width=10; |

1. The following SAS program is submitted:

proc sort data=houses;

by style;

run;

proc print data=houses;

<*insert SAS statement(s) here*>

run;

The following list report is generated:

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | style | bedrooms | baths | price | | --- | --- | --- | --- | |  | | | | | | | CONDO | 2  3  4  2 | 1.5  2.5  2.5  2.0 | $80,050  $79,350  $127,150  $110,700 |  |  | | TWOSTORY | 4  2  2  4 | 3.0  1.0  1.0  2.5 | $107,250  $55,850  $569,250  $102,950 |  |  | |

Which of the following SAS statements completes the program and creates the desired report?

|  |  |  |
| --- | --- | --- |
|  | *a.* | id style;  var bedroom baths price; |
|  | *b.* | id style;  var style bedrooms baths price; |
|  | *c.* | id style;  by style;  var bedrooms baths price; |
|  | *d.* | id style;  by style;  var style bedrooms baths price; |

1. The following SAS program is submitted:

proc freq data=class;

run;

The SAS data set **Class** has two character variables and three numeric variables. How many tables are generated?

|  |  |  |
| --- | --- | --- |
|  | *a.* | 0 |
|  | *b.* | 2 |
|  | *c.* | 3 |
|  | *d.* | 5 |

1. The following SAS program is submitted:

proc means data=sasuser.houses mean;

<insert statement(s) here>

run;

The following report is produced:

| **style** | **N Obs** | **Variable** | **Label** | **Mean** |
| --- | --- | --- | --- | --- |
| CONDO | 4 | bedrooms baths | Number of bedrooms Number of bathrooms | 2.7500000 2.1250000 |
| RANCH | 4 | bedrooms baths | Number of bedrooms Number of bathrooms | 2.2500000 2.0000000 |
| SPLIT | 3 | bedrooms baths | Number of bedrooms Number of bathrooms | 2.6666667 1.8333333 |
| TWOSTORY | 4 | bedrooms baths | Number of bedrooms Number of bathrooms | 3.0000000 1.8750000 |

Which of the following statements completes the program and creates the desired report?

|  |  |  |
| --- | --- | --- |
|  | *a.* | class style; |
|  | *b.* | var bedrooms baths; |
|  | *c.* | class style;  var bedrooms baths; |
|  | *d.* | var style;  class bedrooms baths; |

1. The following SAS program is submitted:

options pageno=1 number;

proc print data=sasuser.houses;

run;

proc means data=sasuser.shoes;

run;

The report created by the PRINT procedure generates five pages of output. What is the page number on the first page that is generated by the MEANS procedure?

|  |  |  |
| --- | --- | --- |
|  | *a.* | 1 |
|  | *b.* | 2 |
|  | *c.* | 5 |
|  | *d.* | 6 |

1. Which one of the following statements describes creating user-defined formats with the FORMAT procedure? (Extra Point)

|  |  |  |
| --- | --- | --- |
|  | *a.* | User-defined formats cannot end in a number. |
|  | *b.* | The format name can be up to 200 characters in length. |
|  | *c.* | The format name can end with a period in the value statement. |
|  | *d.* | User-defined formats can share a name with a SAS format if they are stored in a different location. |

1. The following SAS program is submitted (Extra Point)

ods html file='newfile.html';

proc print data=sasuser.houses;

run;

proc means data=sasuser.houses;

run;

proc freq data=sasuser.shoes;

run;

ods html close;

proc print data=sasuser.shoes;

run;

How many HTML files are created?

|  |  |  |
| --- | --- | --- |
|  | *a.* | 1 |
|  | *b.* | 2 |
|  | *c.* | 3 |
|  | *d.* | 4 |

1. Which statement directs output to an HTML file? (Extra Point)

|  |  |  |
| --- | --- | --- |
|  | *a.* | the ODS HTML statement |
|  | *b.* | the HTML statement |
|  | *c.* | the EXPORT statement |
|  | *d.* | the PRINTTO statement |

1. The following SAS program is submitted: (Extra Point)

data test;

set ia.flts\_pts;

if job\_code='fltat3'

then description='Flight Attendant';

length description 8;

run;

The variable Job\_code is a character variable with a length of 6 bytes. What is the result?

|  |  |  |
| --- | --- | --- |
|  | *a.* | The variable Description with a length of 6 bytes is created. |
|  | *b.* | The variable Description with a length of 8 bytes is created. |
|  | *c.* | The variables Description with a length of 16 bytes is created. |
|  | *d.* | The variable Description is not created. The DATA step fails because of errors. |

1. The descriptor and data portions of the **Work.Salaries** data set are shown below.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | | **Variable** | **Type** | **Len** | **Pos** | | name | Char | 8 | 0 | | salary | Char | 8 | 16 | | status | Char | 8 | 8 | |

| **name** | **status** | **salary** |
| --- | --- | --- |
| Liz | S | 15,600 |
| Herman | S | 26,700 |
| Marty | S | 35,000 |

The following SAS program is submitted:

proc print data=work.salaries;

where salary<20000;

run;

No observations are output. Which of the following answers would result in a report of individuals with Salary less than *$20,000* upon re-execution of the program?

|  |  |  |
| --- | --- | --- |
|  | *a.* | Right justify the Salary value in the WHERE statement in the PRINT step. |
|  | *b.* | Use a PUT function to write the Salary values with leading zeroes in a DATA step before the PRINT step. |
|  | *c.* | Change 20000 (which is a numeric constant) to '20,000' (which is a character constant) in the WHERE statement in the PRINT step. |
|  | *d.* | Change the < operator to the le operator in the WHERE statement in the PRINT step. |

1. The following SAS program is submitted: (Extra Point)

data work.totalsales;

set work.monthlysales(keep=year product sales);

retain monthsales{12};

array monthsales{12};

do i=1 to 12;

monthsales{i}=sales;

end;

cnt+1;

monthsales{cnt}=sales;

run;

The data set named **Work.Monthlysales** has one observation per month for each of five years for a total of 60 observations. What is the result?

|  |  |  |
| --- | --- | --- |
|  | *a.* | The program fails execution because of data errors. |
|  | *b.* | The program fails execution because of syntax errors. |
|  | *c.* | The program runs with warnings and creates the **Work.Totalsales** data set with 60 observations. |
|  | *d.* | The program runs without errors or warnings and creates the **Work.Totalsales** data set with 60 observations. |

1. Which one of the following TITLE statements displays **Jane's Dog** as the title of SAS output?

|  |  |  |
| --- | --- | --- |
|  | *a.* | title "Jane"s Dog"; |
|  | *b.* | title 'Jane"s Dog'; |
|  | *c.* | title "Jane's Dog"; |
|  | *d.* | title 'Jane' ' 's Dog'l |

1. The data set **Work.Allmonths** contains four quarters of data. A DATA step is submitted and a portion of the SAS log is shown below. (Extra Point)

|  |  |
| --- | --- |
| SAS Log   |  | | --- | | 208 data arrays; 209 set work.allmonths(keep=quarter num\_sold); 210 by quarter;  211 array sold{3};  212 if first.quarter then cnt=1;  213 sold{cnt}=num\_sold;  214 cnt+1;  215 if last.quarter then output;  216 run;  ERROR: Array subscript out of range at line 213  column 4. quarter=2 num\_sold=3 FIRST.quarter=0  LAST.quarter=1 sold1=. sold2=. sold3=. cnt=4  \_ERROR\_=1 \_N\_=7  NOTE: The SAS System stopped processing this  step because of errors.  NOTE: There were 8 observations read from the  dataset WORK.ALLMONTHS.  WARNING: The data set WORK.ARRAYS may be incomplete.  When this step was stopped there were 1  observations and 6 variables.  WARNING: Data set WORK.ARRAYS was not replaced  because this step was stopped.  NOTE: DATA statement used:  real time 0.10 seconds | |

Which of the following answers would correct the error message?

|  |  |  |
| --- | --- | --- |
|  | *a.* | Reverse the order of lines 213 and 214. |
|  | *b.* | Increase the ARRAY dimension to a value of *4*. |
|  | *c.* | Sort the **Work.Allmonths** data set in descending order by the Quarter variable. |
|  | *d.* | Add a WHERE= data set option to the **Work.Allmonths** data set to limit values of the variable Cnt to *3* or less. |

1. The following SAS program is submitted: (Extra Point)

data test;

infile '*file-specification*';

input country $ amount;

run;

Which one of the following automatic variables can be used to test whether a value for the variable Amount is non-numeric?

|  |  |  |
| --- | --- | --- |
|  | *a.* | \_N\_ |
|  | *b.* | \_ERROR\_ |
|  | *c.* | \_NUMERIC\_ |
|  | *d.* | \_CHARACTER\_ |
| . |  |  |

1. The following SAS SORT procedure step generates an output data set:  
   proc sort data = sasuser.houses out = report;  
   by style;  
   run;  
   In which library is the output data set stored?  
   A.WORK  
   B.REPORT.  
   C.HOUSES  
   D.SASUSER
2. The following SAS DATA step is submitted:  
   libname temp 'SAS-data-library';  
   data temp.report;  
   set sasuser.houses;  
   newvar = price \* 1.04;  
   run;  
   Which one of the following statements is true regarding the program above?  
   A. The program is reading from a temporary data set and writing to a temporary data set.  
   B. The program is reading from a temporary data set and writing to a permanent data set.  
   C. The program is reading from a permanent data set and writing to a temporary data set.  
   D. The program is reading from a permanent data set and writing to a permanent data set.
3. Which one of the following SAS DATA steps saves the temporary data set named MYDATA as a permanent data set?  
   A. libname sasdata 'SAS-data-library';  
   data sasdata.mydata;  
   copy mydata;  
   run;  
   B. libname sasdata 'SAS-data-library';  
   data sasdata.mydata;  
   keep mydata;  
   run;  
   C. libname sasdata 'SAS-data-library';  
   data sasdata.mydata;  
   save mydata;  
   run;  
   D. libname sasdata 'SAS-data-library';  
   data sasdata.mydata;  
   set mydata;  
   run;
4. The following SAS DATA step is submitted:  
   data sasdata.atlanta  
   sasdata.boston  
   work.portland  
   work.phoenix;  
   set company.prdsales;  
   if region = 'NE' then output boston;  
   if region = 'SE' then output atlanta;  
   if region = 'SW' then output phoenix;  
   if region = 'NW' then output portland;  
   run;  
   Which one of the following is true regarding the output data sets?  
   A. No library references are required.  
   B. The data sets listed on all the IF statements require a library reference.  
   C. The data sets listed in the last two IF statements require a library reference.  
   D. The data sets listed in the first two IF statements require a library reference.
5. Which one of the following SAS system options prevents the page number from appearing on a report?

A. NONUM  
B. NOPAGE  
C. NONUMBER  
D. NOPAGENUM

49.Which one of the following is true when SAS encounters a data error in a DATA step?

A. The DATA step stops executing at the point of the error, and no SAS data set is created.  
B. A note is written to the SAS log explaining the error, and the DATA step continues to execute.  
C. A note appears in the SAS log that the incorrect data record was saved to a separate SAS file for further examination.  
D. The DATA step stops executing at the point of the error, and the resulting DATA set contains observations up to that point.

50. The following SAS program is submitted:

Data work.one;

X=3;

Y=2;

Z=x\*\*y;

Run;

Which one of the following is the value of the variable z in the output data set?

A.6

B.9

C. . (Missing numeric value)

D. The program fails to execute due to errors