

Solutions to Practices

1. Using the DATA Step Debugger to Examine Execution Steps

Note: Detailed steps are included in the practice. The answers to questions asked in the practice are provided below.

How many variables are in the PDV? What are the initial values?

Ten variables are included in the PDV. Character variables are blank, and numeric variables are periods. _ERROR_ is 0, and _N_ is 1.

Why was the first row (*Cape Krusenstern National Monument*) not read into the PDV in the first iteration of the DATA step?

Cape Krusenstern National Monument is not read into the PDV because it does not meet the WHERE statement condition. Kenai Fjords National Park is the first row where Type="PARK".

Which statements are executable?

SET, Type= assignment statement, AvgMonthlyVisitors= assignment statement

Which statements are compile-time only?

WHERE, FORMAT, and KEEP

2. Using PUTLOG Statements to Examine Execution Steps

Which statements are compile-time only?

KEEP, WHERE, and FORMAT

What will be assigned for the length of Size?

Size will have a length of 5. The first time Size occurs in the DATA step, it is assigned a value of Small, which is five characters.

```
data np_parks;
    set pg2.np_final(obs=5);
    putlog "NOTE: START DATA STEP ITERATION";
    keep Region ParkName AvgMonthlyVisitors Acres Size;
    length Size $ 6;
    where Type="PARK";
    format AvgMonthlyVisitors Acres comma10.;
    Type=procase(Type);
    putlog Type=;
    AvgMonthlyVisitors=sum(DayVisits,Campers,OtherLodging)/12;
    if Acres<1000 then Size="Small";
    else if Acres<100000 then Size="Medium";
    else Size="Large";
    putlog _all_;
run;
```

End of Solutions