MET MA 603: SAS Programming and Applications

Exam 2 Part II

75 points

Exam Rules

- No collaboration, notes, or other outside resources are allowed, except for a hand-written 3 by 5 inch index card.
- Save solutions to all problems in a single SAS file and upload it to Blackboard. Grading will be based on the submitted code. Do not upload any datasets or other files.
- Include your name in the name of the SAS file.
- Use “exam2” for your libname.
- Multiple attempts are allowed as long as they are submitted before the deadline. The most recent attempt submitted before the deadline will be the one that is graded.
- Points will be deducted from late submissions.

Question 7 (15 points)

A travel club took a survey asking which countries the members of the club had visited. The results are contained in the SAS dataset “Travel_Log”. The dataset contains variables for 197 countries.

Use SAS to calculate how many countries each member of the club has visited.

Question 6 (15 points)

Use the “Travel_Log” SAS dataset.

Determine the correlation between members visiting Australia and visiting New Zealand (New_Zealand in the dataset).

Hint: Create numeric variable indicators in place of “Y” and “N”.

You must leave a comment in your code stating the correlation.

For example:

```
* Correlation is 50.0% ;
```

Question 7 (15 points)

The dataset “Reported_Claims” contains Homeowners claim information. Calculate the total number of reported losses by LossType.

Your result should only contain the LossType and the total for ReportedLoss. It can be either a SAS dataset or a Results Viewer output similar to below:

	LossType	ReportedLossTotal
1	Fire	[illegible]
2	Hail	[illegible]
3	Theft	[illegible]
4	Water	[illegible]
5	Wind	[illegible]

Variable	Sum
Hail	[illegible]
Theft	[illegible]
Wind	[illegible]
Water	[illegible]
Fire	[illegible]

Question 8 (15 points)

Use the “Reported_Claims” and “Deductibles” SAS datasets.

Determine how much each customer should be paid for their reported loss. The amount that the insurance company pays to the customer (that is, the Net Loss) is the Reported Loss minus the Deductible. For example, if the Reported Loss is $18,003 and the Deductible is $500 then the Net Loss is $17,503.

Use the PolicyNumber variable to combine the Reported_Claims and Deductible datasets and calculate the Net Loss for each customer.

In your final dataset, only include claims where the Net Loss is greater than 0.

Question 9 (15 points)

Export the information in the SAS dataset "Reported_Claims" into a text file.

The text file should follow this layout:

Variable	Columns	Format	Example
LossDate	1-9	Date9	02SEP2017
ClaimNumber	11-16		1001
LossType	18-25		Hail
ReportedLoss	30-45	Dollar16	$18,003

The text file should not contain column names.