STAT 506 Homework 1

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Question 1

(a)

There are 2 steps (since 1 Data and 1 Proc).

There are 7 statements (since 7 semicolons).

(b)

The SAS System

Make	Model	MPG_City
Honda	Civic Hybrid 4dr manual (gas/electric)	46
Honda	Insight 2dr (gas/electric)	60
Honda	Civic HX 2dr	36
Toyota	Prius 4dr (gas/electric)	59
Volkswagen	Jetta GLS TDI 4dr	38

From the report, we see that there are 5 rows and 3 columns, excluding the variable name row.

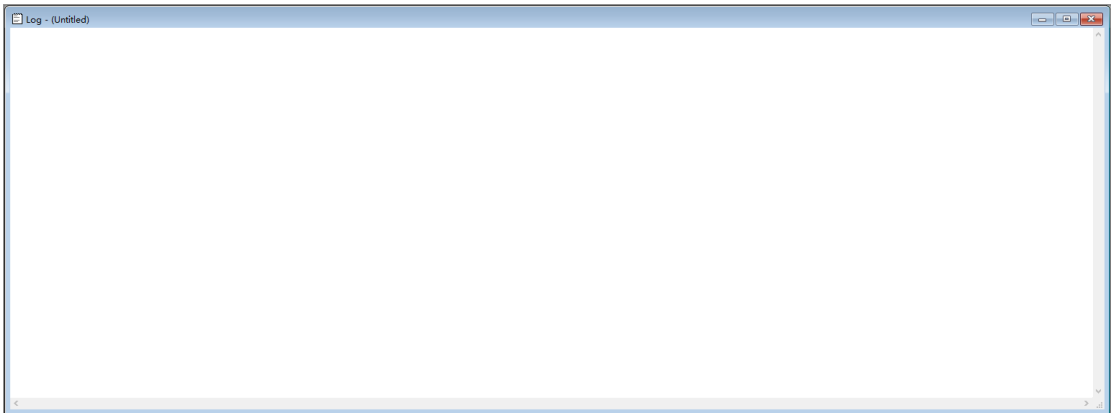
(c)

```
1    data hw1;
2     set sashelp.cars;
3    run;

NOTE: There were 428 observations read from the data set SASHELP.CARS.
NOTE: The data set WORK.HW1 has 428 observations and 15 variables.
NOTE: DATA statement used (Total process time):
      real time           0.03 seconds
      cpu time            0.01 seconds
```

We can see that there are 428 observations and 15 variables in the sashelp.cars table.

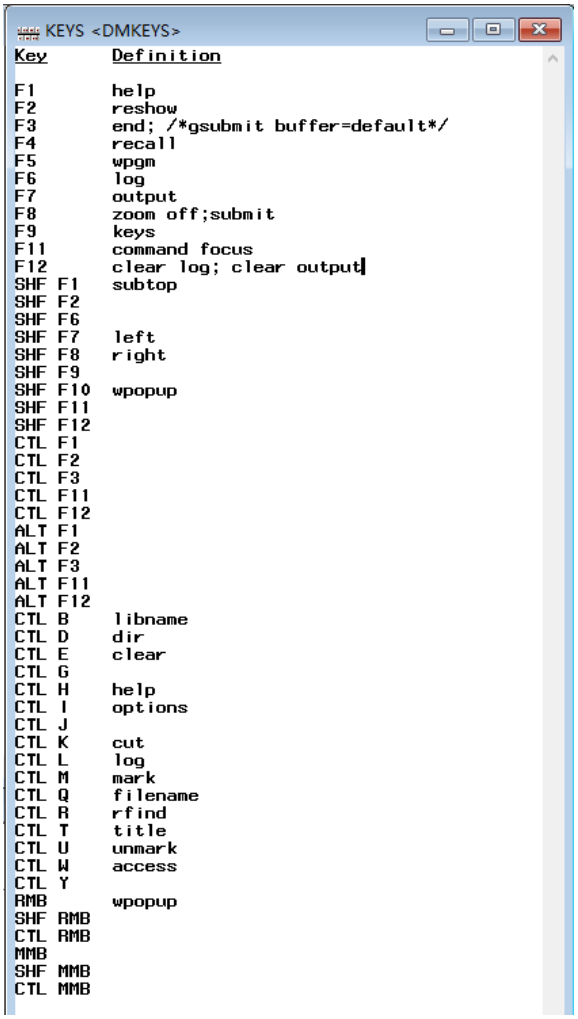
(d)



As we can see, I use Edit-clear all to clear the log window.

Question 2

(a)

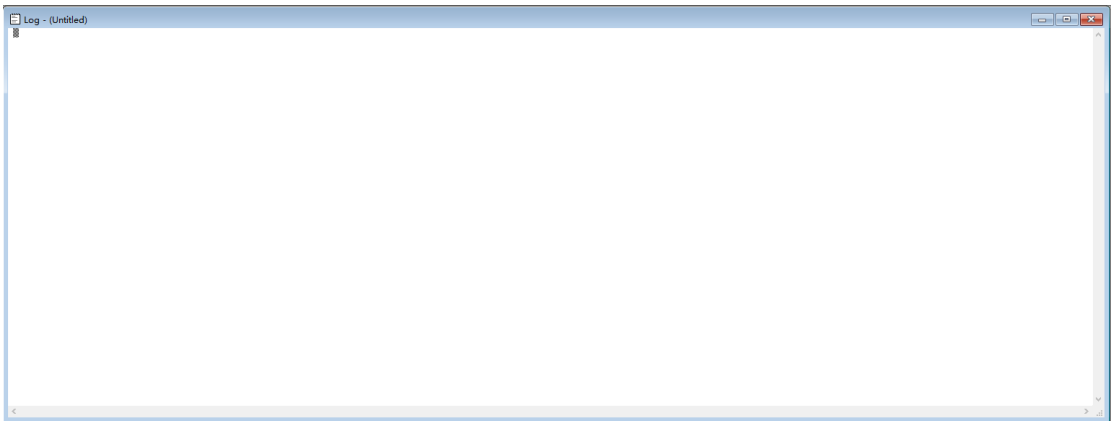


The commands are entered as the screenshot.

(b)

F9 is currently programmed to submit a KEYS command. When press F9, the KEYS window appears.

(c)



After pressing the F12 key, the Log and Output windows are cleared.

Question 3

(a)

Errors:

1. Spell error: it should be “print” instead of “prnt”.

2. There should be a semicolon in the second line, after the var statement.

3. The comment has only the left part but not the right part. There should be a “*/” before the RUN statement.

(b)

```
proc print data=sashelp.cars;
 var EngineSize hoRsepoWeR;
/* This line is a comment and we don't want it to run;*/
RUN;
```

The SAS System

Obs	EngineSize	Horsepower
1	3.5	265
2	2.0	200
3	2.4	200
4	3.2	270
5	3.5	225

As the above screenshots, the code and the output are provided.

Question 4

(a)

That is “-3” stored as a numeric value representing December 29, 1959 in SAS. Because it is 3 days prior to January 1st, 1960.

(b)

The default length is eight (8 bytes).

Question 5

(a)

```
proc contents data = sashelp.Holiday;
run;
```

The code is shown above.

(b)

There are 27 observations in the data set.

There are 8 variables in the data set.

The length of the variable **name** is 32 (32 bytes).

The SAS System

The CONTENTS Procedure

Data Set Name	SASHELP.HOLIDAY	Observations	27
Member Type	DATA	Variables	8

Alphabetic List of Variables and Attributes

#	Variable	Type	Len
4	begin	Num	8
3	category	Char	32
7	day	Num	8
2	desc	Char	64
5	end	Num	8
6	month	Num	8
1	name	Char	32
8	rule	Num	8

The screenshot proves the answers.

Question 6

(a)

```
libname pg1 base 'E:\SAS\PG1\data' ;
```

Libname statement is submitted.

(b)

```
21   libname pg1 base 'E:\SAS\PG1\data' ;
NOTE: Libref PG1 was successfully assigned as follows:
      Engine:        BASE
      Physical Name: E:\SAS\PG1\data
```

As the log stated, the SAS data library was assigned.

(c)

Code:

```
libname pg1 base 'E:\SAS\PG1\data' ;
proc contents data = pg1.storm_range;
run;
```

Output:

The SAS System

The CONTENTS Procedure

Data Set Name	PG1.STORM_RANGE	Observations	2959
Member Type	DATA	Variables	7
Engine	BASE	Indexes	0
Created	01/16/2022 20:07:15	Observation Length	104
Last Modified	01/16/2022 20:07:15	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	WINDOWS_64		
Encoding	wlatin1 Western (Windows)		

Engine/Host Dependent Information	
Data Set Page Size	65536
Number of Data Set Pages	5
First Data Page	1
Max Obs per Page	629
Obs in First Data Page	612
Number of Data Set Repairs	0
ExtendObsCounter	YES
Filename	E:\SAS\PG1\data\storm_range.sas7bdat
Release Created	9.0401M7
Host Created	X64_10PRO
Owner Name	DESKTOP-OHLK8RL\17654
File Size	384KB
File Size (bytes)	393216

Alphabetic List of Variables and Attributes					
#	Variable	Type	Len	Format	Informat
2	Basin	Char	2	$CHAR2.	$CHAR2.
3	Name	Char	57	$CHAR57.	$CHAR57.
1	Season	Num	8	BEST4.	BEST4.
4	Wind1	Num	8	BEST3.	
5	Wind2	Num	8	BEST3.	
6	Wind3	Num	8	BEST3.	
7	Wind4	Num	8	BEST3.	

Question 7

(a)

```
proc import datafile = "E:\SAS\PG1/hw1data.csv" dbms = csv out = work.hw1data;
run;
```

The code is above.

(b)

This file named **hw1data.sas7bdat** would be deleted after ending the SAS session. This is because it is under the "work" folder, and every time we end the SAS session, the work folder will be cleaned and would be empty when we start a new session.

(c)

The SAS System

Obs	Did_This_Work	Homeworks_Completed
1	Yes	1

The output is above.