WorkShop 1-A

Problem 2.1

(a)

Code:

*Program 1

CODE LOG RESULTS OUTPUT DATA

```
1
2  /* Read text file and compute values
3  By - Parth Gadani
4  Date - 15/01/2021
5  */
6  data portfolio;
7   infile '/folders/myfolders/71442_example/stocks.txt';
8   input Symbol $ Price Number;
9   Value = Number*Price;
10 run;
11
12 title "Listing of Portfolio";
13 proc print data=portfolio noobs ;
14 run;
```

Result:

*Program 1

CODE LOG RESULTS OUTPUT DATA

Table of Contents

Listing of Portfolio

Symbol	Price	Number	Value
AMGN	67.66	100	6766.0
DELL	24.60	200	4920.0
GE	34.50	100	3450.0
HPQ	32.32	120	3878.4
IBM	82.25	50	4112.5
MOT	30.24	100	3024.0

(b)

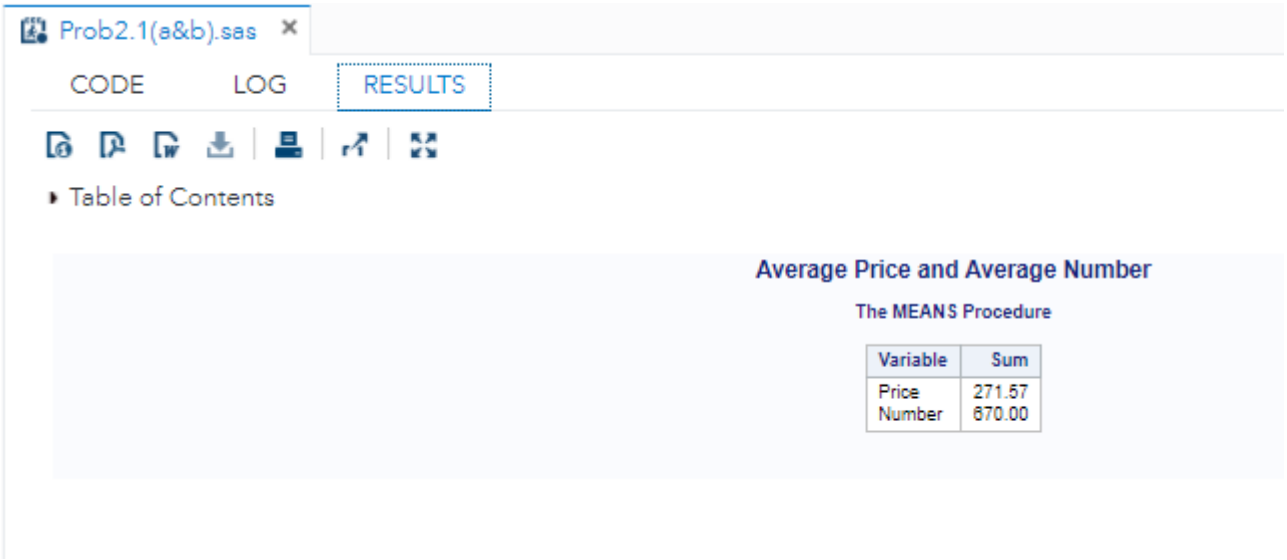
Code:

Prob2.1(a&b).sas

CODE LOG RESULTS

```
1
2  /* Read text file and compute values
3  By - Parth Gadani
4  Date - 15/01/2021
5
6  data portfolio;
7   infile '/folders/myfolders/71442_example/stocks.txt';
8   input Symbol $ Price Number;
9   Value = Number*Price;
10 run;
11
12 title "Portfolio";
13 proc print data=portfolio noobs ;
14 run;
15 */
16 title "Average Price and Average Number";
17 proc means data=portfolio sum maxdec=2;
18 var Price Number;
19 run;
```

Result:



Problem 2.2

Code:

Prob_2.2.sas

CODE LOG RESULTS

```
1  data Prob2;
2   input ID $
3  Height /* in inches */
4  Weight /* in pounds */
5  SBP /* systolic BP */
6  DBP /* diastolic BP */;
7
8  *a) Weight in kilograms (1 kg = 2.2 pounds). Name this variable WtKg;
9  WtKg=Weight/2.2;
10
11 *b) Height in centimeters (1 inch = 2.54 cm). Name this variable HtCm;
12 HtCm=Height/2.54;
13
14 *c) Average blood pressure (call it AveBP) equal to the diastolic blood pressure plus one-third the
15 difference of the systolic blood pressure minus the diastolic blood pressure;
16 AveBP = DBP + 1/3*(SBP - DBP);
17
18 *d) A variable (call it HtPolynomial) equal to 2 times the height squared plus 1.5 times the height
19 cubed;
20 HtPolynomial = 2 *Height**2 + 1.5 *Height**3;
21
22 datalines;
23 001 68 150 110 70
24 002 73 240 150 90
25 003 62 101 120 80
26 ;
27 title "Listing of Prob2";
28 proc print data=Prob2 noobs;
29 run;
```

/folders/myfolders/lectures/Prob_2.2.sas

Result:

Prob_2.2.sas

CODE LOG RESULTS OUTPUT DATA

Table of Contents

Listing of Prob2

ID	Height	Weight	SBP	DBP	WtKg	HtCm	AveBP	HtPolynomial
001	68	150	110	70	68.182	26.7717	83.333	480896.0
002	73	240	150	90	109.091	28.7402	110.000	594183.5
003	62	101	120	80	45.909	24.4094	93.333	365180.0

Problem 2.3

Notepad Screenshot:

Prob2.3 - Notepad

File Edit Format View Help

Q.)

You are given an equation to predict electromagnetic field (EMF) strength, as follows:

EMF = 1.45 x V + (R/E) x V3 – 125.

If your SAS data set contains variables called V, R, and E, write a SAS assignment statement to compute the EMF strength.

Ans.)

```
EMF = 1.45*V + (R/E)*v**3 - 125;
```

Problem 2.4

Notepad Screenshot:

Prob2.4 - Notepad

File Edit Format View Help

Q.)

What is wrong with this program?

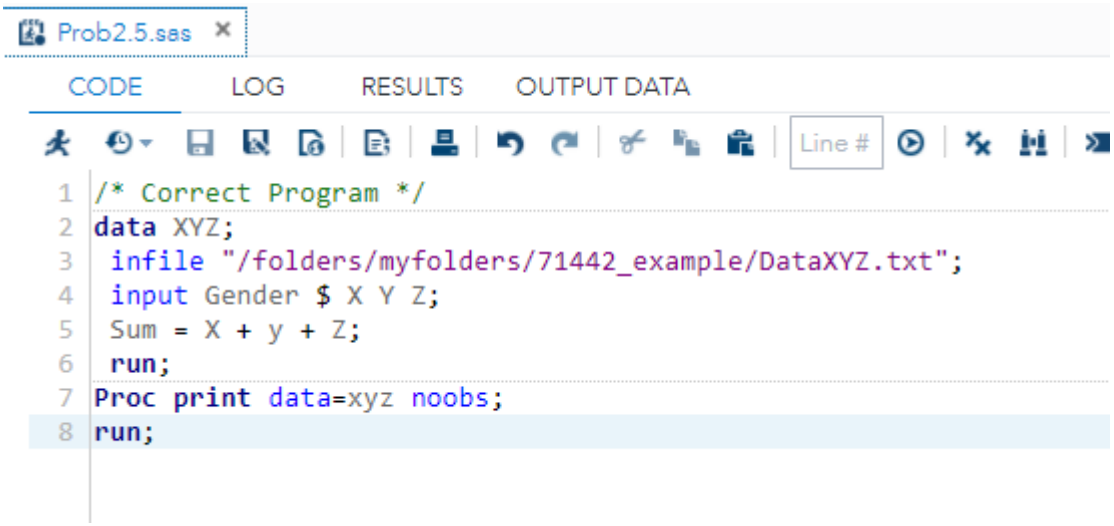
```
 001 data New-Data;
 002 infile C:\books\learning\Prob4data.txt;
 003 input x1 x2
 004 y1 = 3(x1) + 2(x2);
 005 y2 = x1 / x2;
 006 New_Variable_from_X1_and_X2 = X1 + X2 – 37;
 007 run;
```

Ans.)

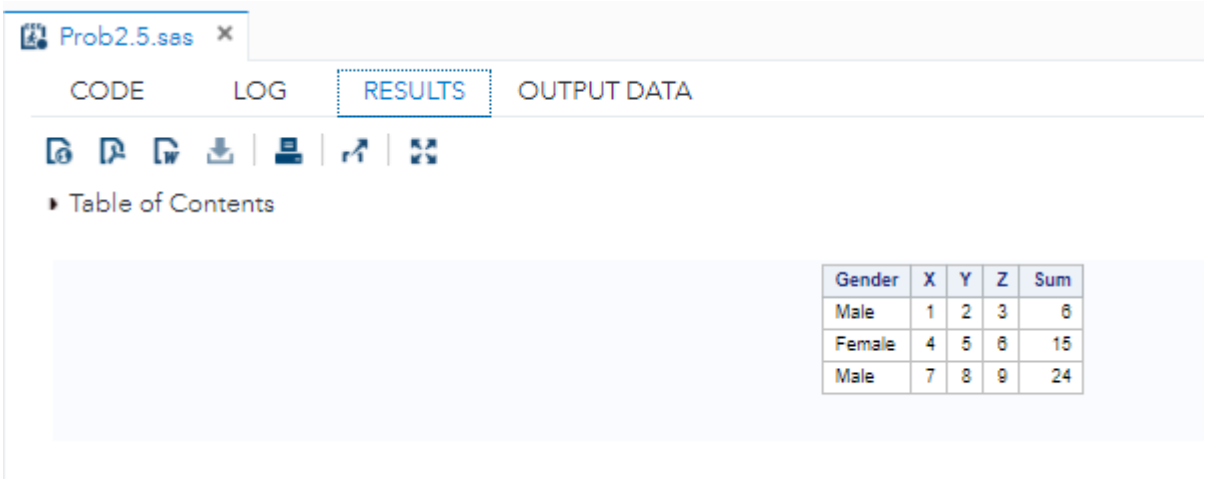
```
Invalid data set name (cannot contain - ) on line 001
filename should be quoted on line 002
Missing ; on line 003
Missing * on line 004
```

Problem 2.5

Code:



Result:



Notepad screenshot: