### The CONTENTS Procedure

Data Set Name	WORK.ARTISTS_CSV	Observations	10
Member Type	DATA	Variables	3
Engine	V9	Indexes	0
Created	12/05/2021 13:07:56	Observation Length	44
Last Modified	12/05/2021 13:07:56	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	SOLARIS_X86_64, LINUX_X86_64, ALPHA_TRU64, LINUX_IA64		
Encoding	utf-8 Unicode (UTF-8)		

	Engine/Host Dependent Information				
Data Set Page Size	131072				
Number of Data Set Pages	1				
First Data Page	1				
Max Obs per Page	2969				
Obs in First Data Page	10				
Number of Data Set Repairs	0				
Filename	/saswork/SAS_work215900013643_odaws04-usw2.oda.sas.com/SAS_work2B0700013643_odaws04-usw2.oda.sas.com/artists_csv.sas7bdat				
Release Created	9.0401M6				
Host Created	Linux				
Inode Number	536984437				
Access Permission	rw-rr				
Owner Name	u59306293				
File Size	256KB				
File Size (bytes)	262144				

	Alphabetic List of Variables and Attributes						
#	Variable Type Len Format Informat						
2	Genre	Char	22	\$22.	\$22.		
1	Name	Char	21	\$21.	\$21.		
3	Nationality	Char	1	\$1.	\$1.		

## Assignment 1

### The CONTENTS Procedure

Data Set Name	WORK.ARTISTS_TEXT_TXT	Observations	10
Member Type	DATA	Variables	3
Engine	V9	Indexes	0
Created	12/05/2021 13:07:56	Observation Length	44
Last Modified	12/05/2021 13:07:56	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	SOLARIS_X86_64, LINUX_X86_64, ALPHA_TRU64, LINUX_IA64		
Encoding	utf-8 Unicode (UTF-8)		

	Engine/Host Dependent Information				
Data Set Page Size	131072				
Number of Data Set Pages	1				

	Engine/Host Dependent Information				
First Data Page	1				
Max Obs per Page	2969				
Obs in First Data Page	10				
Number of Data Set Repairs	0				
Filename	/saswork/SAS_work215900013643_odaws04-usw2.oda.sas.com/SAS_work2B0700013643_odaws04-usw2.oda.sas.com/artists_text_txt.sas7bdat				
Release Created	9.0401M6				
Host Created	Linux				
Inode Number	536984440				
Access Permission	TW-ГГ				
Owner Name	u59306293				
File Size	256KB				
File Size (bytes)	262144				

	Alphabetic List of Variables and Attributes						
#	# Variable Type Len Format Informa						
1	VAR1	Char	21	\$21.	\$21.		
2	VAR2	Char	22	\$22.	\$22.		
3	VAR3	Char	1	\$1.	\$1.		

Obs	Name	Weight	Score1	Score2	Score3
1	Lucky	2.3	1.9	2.3	3.0
2	Spot	4.6	2.5	3.1	0.5
3	Tubs	7.1	2.2	3.1	3.8
4	Нор	4.5	3.2	1.9	2.6
5	Noisy	3.8	1.3	1.8	1.5
6	Winner	5.7	2.2	1.3	2.8

## Assignment 1

Obs	Name	Weight	Score1	Score2	Score3
1	Lucky	2.3	1.9	2.3	3.0
2	Spot	4.6	2.5	3.1	0.5
3	Tubs	7.1	2.2	3.1	3.8
4	Нор	4.5	3.2	1.9	2.6
5	Noisy	3.8	1.3	1.8	1.5
6	Winner	5.7	2.2	1.3	2.8

Obs	VAR1	VAR1 VAR2	
1	Mary Cassatt	Impressionism	U
2	Paul Cezanne	Post-impressionism	F
3	Salvador Dali	Surrealism	
4	Henri Matisse	Post-impressionism	F
5	Claude Monet	Impressionism	F
6	Berthe Morisot	Impressionism	F
7	Pablo Picasso	Surrealism	
8	Jackson Pollock	Abstract expressionism	U

Obs	VAR1	VAR2	VAR3
9	Pierre Auguste Renoir	Impressionism	F
10	Vincent van Gogh	Post-impressionism	N

Obs	Date	Num1	Num2	Num3	Gender	days
1	21185	1	100	0	F	1434
2	21185	2	99	1	М	1434
3	21186	3	98	1	F	1433
4	21187	4	96	0	М	1432
5	21187	5	103	0	F	1432
6	21186	6	95	1	М	1433
7	21185	7	100	0	F	1434
8	21187	8	101	1	F	1432
9	21189	9	97	1	М	1430
10	21189	10	96	0	М	1430
11	21190	11	96	0	М	1429
12	21191	12	105	1	F	1428

## Assignment 3

Obs	Date	Open	High	Low	Close	Adj_close	volumn	daily_return
1	Sep 10, 2021	4506.92	4520.47	4457.66	4458.58	4458.58	2851140000	-0.010726
2	Sep 09, 2021	4513.02	4529.90	4492.07	4493.28	4493.28	3035300000	-0.004374
3	Sep 08, 2021	4518.09	4521.79	4493.95	4514.07	4514.07	2808480000	-0.000890
4	Sep 07, 2021	4535.38	4535.38	4513.00	4520.03	4520.03	3098870000	-0.003385
5	Sep 03, 2021	4532.42	4541.45	4521.30	4535.43	4535.43	2609660000	0.000664
6	Sep 02, 2021	4534.48	4545.85	4524.66	4536.95	4536.95	2897010000	0.000545
7	Sep 01, 2021	4528.80	4537.11	4522.02	4524.09	4524.09	3101830000	-0.001040
8	Aug 31, 2021	4529.75	4531.39	4515.80	4522.68	4522.68	3090380000	-0.001561
9	Aug 30, 2021	4513.76	4537.36	4513.76	4528.79	4528.79	2557300000	0.003330
10	Aug 27, 2021	4474.10	4513.33	4474.10	4509.37	4509.37	2862360000	0.007883
11	Aug 26, 2021	4493.75	4495.90	4468.99	4470.00	4470.00	2704600000	-0.005285
12	Aug 25, 2021	4490.45	4501.71	4485.66	4496.19	4496.19	2554680000	0.001278
13	Aug 24, 2021	4484.40	4492.81	4482.28	4486.23	4486.23	3037770000	0.000408
14	Aug 23, 2021	4450.29	4489.88	4450.29	4479.53	4479.53	2965520000	0.006570
15	Aug 20, 2021	4410.56	4444.35	4406.80	4441.67	4441.67	2867770000	0.007054
16	Aug 19, 2021	4382.44	4418.61	4367.73	4405.80	4405.80	3120840000	0.005330
17	Aug 18, 2021	4440.94	4454.32	4397.59	4400.27	4400.27	2965210000	-0.009158
18	Aug 17, 2021	4462.12	4462.12	4417.83	4448.08	4448.08	2884000000	-0.003146
19	Aug 16, 2021	4461.65	4473.26	4437.66	4472.94	4472.94	2707170000	0.002530
20	Aug 13, 2021	4464.84	4468.37	4460.82	4468.00	4468.00	2371630000	0.000708
21	Aug 12, 2021	4446.08	4461.77	4435.96	4460.83	4460.83	2543860000	0.003318
22	Aug 11, 2021	4442.18	4449.44	4436.42	4442.41	4442.41	2803060000	0.000052

## **Assignment 3**

The MEANS Procedure

Analysis Variable : daily\_return

Mean

4.7963922E-6

Obs	Date	Open	High	Low	Close	Adj_close	volumn	daily_return	Ret_Greater_Average
5	Sep 03, 2021	4532.42	4541.45	4521.30	4535.43	4535.43	2609660000	.000664104	1
6	Sep 02, 2021	4534.48	4545.85	4524.66	4536.95	4536.95	2897010000	.000544715	1
9	Aug 30, 2021	4513.76	4537.36	4513.76	4528.79	4528.79	2557300000	.003329818	1
10	Aug 27, 2021	4474.10	4513.33	4474.10	4509.37	4509.37	2862360000	.007883150	1
12	Aug 25, 2021	4490.45	4501.71	4485.66	4496.19	4496.19	2554680000	.001278268	1
13	Aug 24, 2021	4484.40	4492.81	4482.28	4486.23	4486.23	3037770000	.000408081	1
14	Aug 23, 2021	4450.29	4489.88	4450.29	4479.53	4479.53	2965520000	.006570358	1
15	Aug 20, 2021	4410.56	4444.35	4406.80	4441.67	4441.67	2867770000	.007053526	1
16	Aug 19, 2021	4382.44	4418.61	4367.73	4405.80	4405.80	3120840000	.005330364	1
19	Aug 16, 2021	4461.65	4473.26	4437.66	4472.94	4472.94	2707170000	.002530454	1
20	Aug 13, 2021	4464.84	4468.37	4460.82	4468.00	4468.00	2371630000	.000707752	1
21	Aug 12, 2021	4446.08	4461.77	4435.96	4460.83	4460.83	2543860000	.003317529	1
22	Aug 11, 2021	4442.18	4449.44	4436.42	4442.41	4442.41	2803060000	.000051776	1

## **Assignment 3**

### The MEANS Procedure

Analysis Varial	ole : Open
	Median
	4487.43

## **Assignment 3**

Obs	Date	Open	High	Low	Close	Adj_close	volumn	daily_return	Ret_Greater_Average	High_Open	Pos_Return
1	Sep 10, 2021	4506.92	4520.47	4457.66	4458.58	4458.58	2851140000	-0.010726	0	1	0
2	Sep 09, 2021	4513.02	4529.90	4492.07	4493.28	4493.28	3035300000	-0.004374	0	1	0
3	Sep 08, 2021	4518.09	4521.79	4493.95	4514.07	4514.07	2808480000	-0.000890	0	1	0
4	Sep 07, 2021	4535.38	4535.38	4513.00	4520.03	4520.03	3098870000	-0.003385	0	1	0
5	Sep 03, 2021	4532.42	4541.45	4521.30	4535.43	4535.43	2609660000	0.000664	1	1	1
6	Sep 02, 2021	4534.48	4545.85	4524.66	4536.95	4536.95	2897010000	0.000545	1	1	1
7	Sep 01, 2021	4528.80	4537.11	4522.02	4524.09	4524.09	3101830000	-0.001040	0	1	0
8	Aug 31, 2021	4529.75	4531.39	4515.80	4522.68	4522.68	3090380000	-0.001561	0	1	0
9	Aug 30, 2021	4513.76	4537.36	4513.76	4528.79	4528.79	2557300000	0.003330	1	1	1
10	Aug 27, 2021	4474.10	4513.33	4474.10	4509.37	4509.37	2862360000	0.007883	1	0	1
11	Aug 26, 2021	4493.75	4495.90	4468.99	4470.00	4470.00	2704600000	-0.005285	0	1	0
12	Aug 25, 2021	4490.45	4501.71	4485.66	4496.19	4496.19	2554680000	0.001278	1	1	1
13	Aug 24, 2021	4484.40	4492.81	4482.28	4486.23	4486.23	3037770000	0.000408	1	0	1
14	Aug 23, 2021	4450.29	4489.88	4450.29	4479.53	4479.53	2965520000	0.006570	1	0	1
15	Aug 20, 2021	4410.56	4444.35	4406.80	4441.67	4441.67	2867770000	0.007054	1	0	1
16	Aug 19, 2021	4382.44	4418.61	4367.73	4405.80	4405.80	3120840000	0.005330	1	0	1
17	Aug 18, 2021	4440.94	4454.32	4397.59	4400.27	4400.27	2965210000	-0.009158	0	0	0
18	Aug 17, 2021	4462.12	4462.12	4417.83	4448.08	4448.08	2884000000	-0.003146	0	0	0
19	Aug 16, 2021	4461.65	4473.26	4437.66	4472.94	4472.94	2707170000	0.002530	1	0	1
20	Aug 13, 2021	4464.84	4468.37	4460.82	4468.00	4468.00	2371630000	0.000708	1	0	1
21	Aug 12, 2021	4446.08	4461.77	4435.96	4460.83	4460.83	2543860000	0.003318	1	0	1
22	Aug 11, 2021	4442.18	4449.44	4436.42	4442.41	4442.41	2803060000	0.000052	1	0	1

**Assignment 3** 

The FREQ Procedure

Frequency Percent Row Pct Col Pct

Table of Hig	Table of High_Open by Pos_Return							
	Pos_Return							
High_Open	0	1	Total					
0	2 9.09 18.18 22.22	9 40.91 81.82 69.23	11 50.00					
1	7 31.82 63.64 77.78	4 18.18 36.36 30.77	11 50.00					
Total	9 40.91	13 59.09	22 100.00					

### **Assignment 4**

Obs	Month	Day	Year	Open	High	Low	Close	Adj_close	volumn	Date	Daily_Return
1	9	10	2021	4506.92	4520.47	4457.66	4458.58	4458.58	2851140000	22533	-0.010726
2	9	9	2021	4513.02	4529.90	4492.07	4493.28	4493.28	3035300000	22532	-0.004374
3	9	8	2021	4518.09	4521.79	4493.95	4514.07	4514.07	2808480000	22531	-0.000890
4	9	7	2021	4535.38	4535.38	4513.00	4520.03	4520.03	3098870000	22530	-0.003385
5	9	3	2021	4532.42	4541.45	4521.30	4535.43	4535.43	2609660000	22526	0.000664
6	9	2	2021	4534.48	4545.85	4524.66	4536.95	4536.95	2897010000	22525	0.000545
7	9	1	2021	4528.80	4537.11	4522.02	4524.09	4524.09	3101830000	22524	-0.001040
8	8	31	2021	4529.75	4531.39	4515.80	4522.68	4522.68	3090380000	22523	-0.001561
9	8	30	2021	4513.76	4537.36	4513.76	4528.79	4528.79	2557300000	22522	0.003330
10	8	27	2021	4474.10	4513.33	4474.10	4509.37	4509.37	2862360000	22519	0.007883
11	8	26	2021	4493.75	4495.90	4468.99	4470.00	4470.00	2704600000	22518	-0.005285
12	8	25	2021	4490.45	4501.71	4485.66	4496.19	4496.19	2554680000	22517	0.001278
13	8	24	2021	4484.40	4492.81	4482.28	4486.23	4486.23	3037770000	22516	0.000408
14	8	23	2021	4450.29	4489.88	4450.29	4479.53	4479.53	2965520000	22515	0.006570
15	8	20	2021	4410.56	4444.35	4406.80	4441.67	4441.67	2867770000	22512	0.007054
16	8	19	2021	4382.44	4418.61	4367.73	4405.80	4405.80	3120840000	22511	0.005330
17	8	18	2021	4440.94	4454.32	4397.59	4400.27	4400.27	2965210000	22510	-0.009158
18	8	17	2021	4462.12	4462.12	4417.83	4448.08	4448.08	2884000000	22509	-0.003146
19	8	16	2021	4461.65	4473.26	4437.66	4472.94	4472.94	2707170000	22508	0.002530
20	8	13	2021	4464.84	4468.37	4460.82	4468.00	4468.00	2371630000	22505	0.000708
21	8	12	2021	4446.08	4461.77	4435.96	4460.83	4460.83	2543860000	22504	0.003318
22	8	11	2021	4442.18	4449.44	4436.42	4442.41	4442.41	2803060000	22503	0.000052

### **Assignment 4**

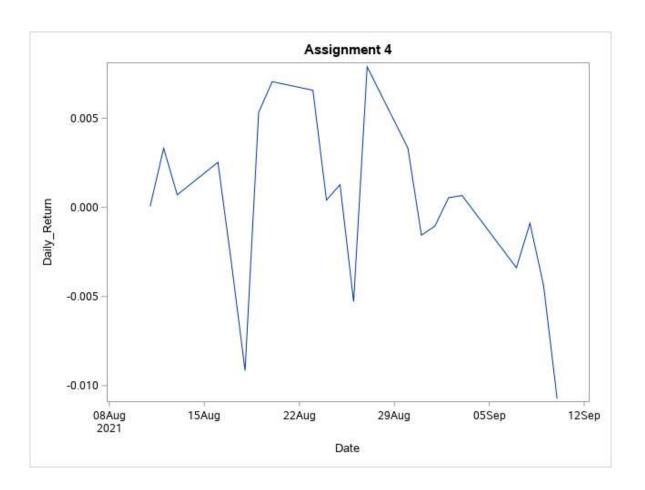
### The MEANS Procedure

Analysis Variable : Daily_Return
Mean
4.7963922E-6

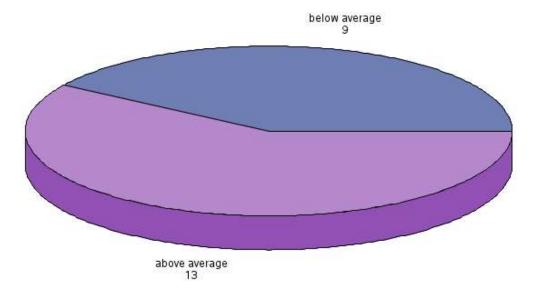
Obs	Month	Day	Year	Open	High	Low	Close	Adj_close	volumn	Date	Daily_Return	HighReturn
1	9	10	2021	4506.92	4520.47	4457.66	4458.58	4458.58	2851140000	22533	-0.010726	0
2	9	9	2021	4513.02	4529.90	4492.07	4493.28	4493.28	3035300000	22532	-0.004374	0
3	9	8	2021	4518.09	4521.79	4493.95	4514.07	4514.07	2808480000	22531	-0.000890	0
4	9	7	2021	4535.38	4535.38	4513.00	4520.03	4520.03	3098870000	22530	-0.003385	0

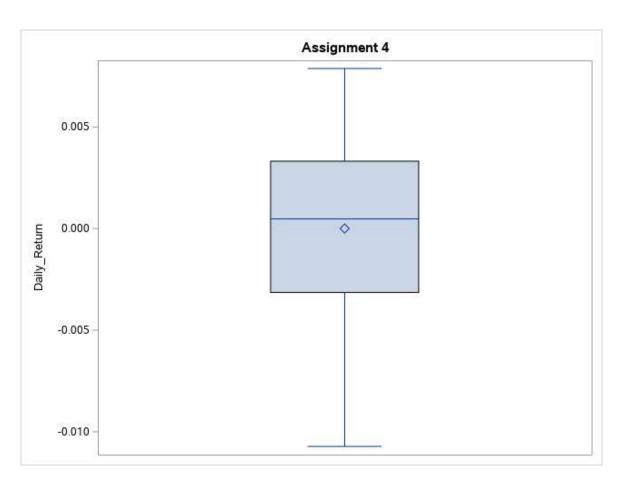
Obs	Month	Day	Year	Open	High	Low	Close	Adj_close	volumn	Date	Daily_Return	HighReturn
5	9	3	2021	4532.42	4541.45	4521.30	4535.43	4535.43	2609660000	22526	0.000664	1
6	9	2	2021	4534.48	4545.85	4524.66	4536.95	4536.95	2897010000	22525	0.000545	1
7	9	1	2021	4528.80	4537.11	4522.02	4524.09	4524.09	3101830000	22524	-0.001040	0
8	8	31	2021	4529.75	4531.39	4515.80	4522.68	4522.68	3090380000	22523	-0.001561	0
9	8	30	2021	4513.76	4537.36	4513.76	4528.79	4528.79	2557300000	22522	0.003330	1
10	8	27	2021	4474.10	4513.33	4474.10	4509.37	4509.37	2862360000	22519	0.007883	1
11	8	26	2021	4493.75	4495.90	4468.99	4470.00	4470.00	2704600000	22518	-0.005285	0
12	8	25	2021	4490.45	4501.71	4485.66	4496.19	4496.19	2554680000	22517	0.001278	1
13	8	24	2021	4484.40	4492.81	4482.28	4486.23	4486.23	3037770000	22516	0.000408	1
14	8	23	2021	4450.29	4489.88	4450.29	4479.53	4479.53	2965520000	22515	0.006570	1
15	8	20	2021	4410.56	4444.35	4406.80	4441.67	4441.67	2867770000	22512	0.007054	1
16	8	19	2021	4382.44	4418.61	4367.73	4405.80	4405.80	3120840000	22511	0.005330	1
17	8	18	2021	4440.94	4454.32	4397.59	4400.27	4400.27	2965210000	22510	-0.009158	0
18	8	17	2021	4462.12	4462.12	4417.83	4448.08	4448.08	2884000000	22509	-0.003146	0
19	8	16	2021	4461.65	4473.26	4437.66	4472.94	4472.94	2707170000	22508	0.002530	1
20	8	13	2021	4464.84	4468.37	4460.82	4468.00	4468.00	2371630000	22505	0.000708	1
21	8	12	2021	4446.08	4461.77	4435.96	4460.83	4460.83	2543860000	22504	0.003318	1
22	8	11	2021	4442.18	4449.44	4436.42	4442.41	4442.41	2803060000	22503	0.000052	1

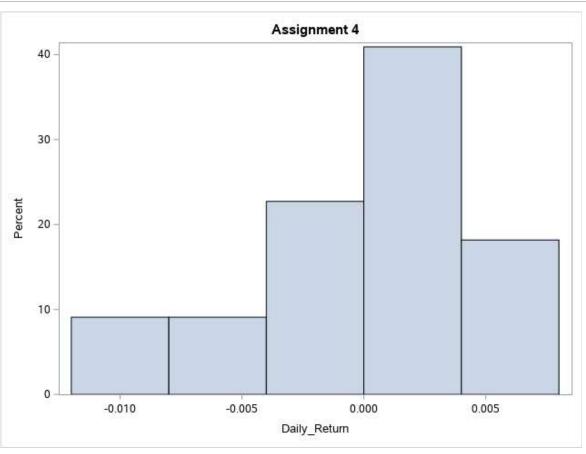
Obs	Month	Day	Year	Open	High	Low	Close	Adj_close	volumn	Date	Daily_Return	HighReturn
1	9	10	2021	4506.92	4520.47	4457.66	4458.58	4458.58	2851140000	22533	-0.010726	below average
2	9	9	2021	4513.02	4529.90	4492.07	4493.28	4493.28	3035300000	22532	-0.004374	below average
3	9	8	2021	4518.09	4521.79	4493.95	4514.07	4514.07	2808480000	22531	-0.000890	below average
4	9	7	2021	4535.38	4535.38	4513.00	4520.03	4520.03	3098870000	22530	-0.003385	below average
5	9	3	2021	4532.42	4541.45	4521.30	4535.43	4535.43	2609660000	22526	0.000664	above average
6	9	2	2021	4534.48	4545.85	4524.66	4536.95	4536.95	2897010000	22525	0.000545	above average
7	9	1	2021	4528.80	4537.11	4522.02	4524.09	4524.09	3101830000	22524	-0.001040	below average
8	8	31	2021	4529.75	4531.39	4515.80	4522.68	4522.68	3090380000	22523	-0.001561	below average
9	8	30	2021	4513.76	4537.36	4513.76	4528.79	4528.79	2557300000	22522	0.003330	above average
10	8	27	2021	4474.10	4513.33	4474.10	4509.37	4509.37	2862360000	22519	0.007883	above average
11	8	26	2021	4493.75	4495.90	4468.99	4470.00	4470.00	2704600000	22518	-0.005285	below average
12	8	25	2021	4490.45	4501.71	4485.66	4496.19	4496.19	2554680000	22517	0.001278	above average
13	8	24	2021	4484.40	4492.81	4482.28	4486.23	4486.23	3037770000	22516	0.000408	above average
14	8	23	2021	4450.29	4489.88	4450.29	4479.53	4479.53	2965520000	22515	0.006570	above average
15	8	20	2021	4410.56	4444.35	4406.80	4441.67	4441.67	2867770000	22512	0.007054	above average
16	8	19	2021	4382.44	4418.61	4367.73	4405.80	4405.80	3120840000	22511	0.005330	above average
17	8	18	2021	4440.94	4454.32	4397.59	4400.27	4400.27	2965210000	22510	-0.009158	below average
18	8	17	2021	4462.12	4462.12	4417.83	4448.08	4448.08	2884000000	22509	-0.003146	below average
19	8	16	2021	4461.65	4473.26	4437.66	4472.94	4472.94	2707170000	22508	0.002530	above average
20	8	13	2021	4464.84	4468.37	4460.82	4468.00	4468.00	2371630000	22505	0.000708	above average
21	8	12	2021	4446.08	4461.77	4435.96	4460.83	4460.83	2543860000	22504	0.003318	above average
22	8	11	2021	4442.18	4449.44	4436.42	4442.41	4442.41	2803060000	22503	0.000052	above average



FREQUENCY of HighReturn







Obs	height	weight	gender	age	sector	booksRead
1	5.2	128	f	36	educ	2
2	5.7	180	f	46	private	4
3	5.7	160	f	29	educ	6
4	5.85	170	f	25	private	4
5	5.25	121	f	36	educ	9
6	5.7	189	f	46	educ	5
7	5.5	150	f	17	educ	2
8	5.8	160	f	29	private	2
9	5.9	140	f	25	private	8
10	5.2	120	f	35	educ	4
11	5.7	180	f	46	private	3
12	6.1	170	f	16	public	2
13	5.7	160	f	28	educ	5
14	6.2	222	m	36	public	3
15	4.9	110	m	26	private	1
16	5.5	153	m	17	educ	2
17	6.4	200	m	16	public	1
18	6.2	205	m	36	public	9
19	4.9	110	m	26	private	3
20	6.2	200	m	16	public	9
21	6.2	220	m	32	private	5
22	4.8	110	m	27	public	7
23	5.1	150	m	17	educ	11
24	5.9	230	m	22	private	4

### The MEANS Procedure

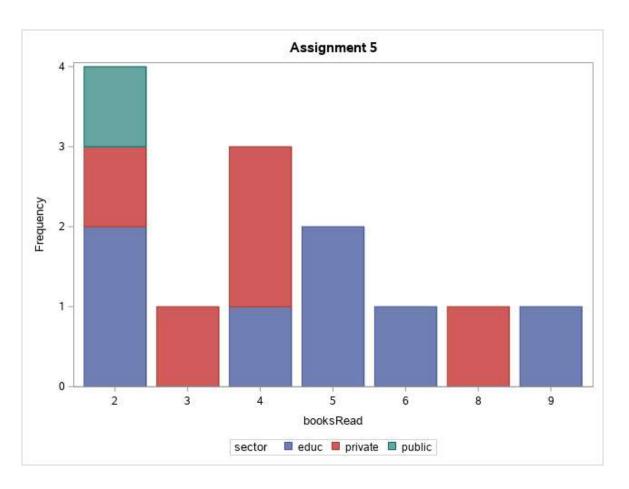
## gender=f

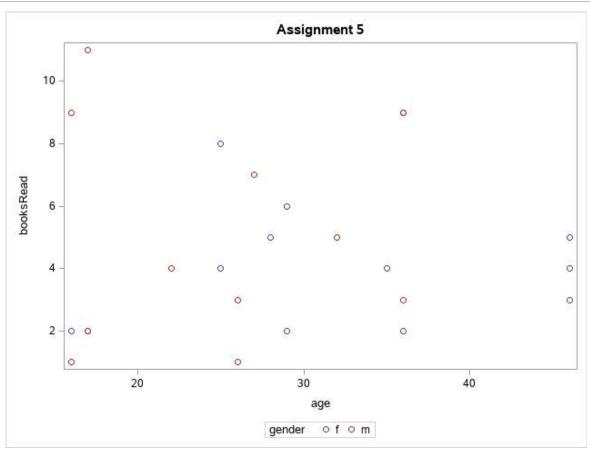
Analysis Variable : booksRead							
Mean	Mean Std Dev						
4.3076923 2.2870875							

#### gender=m

Analysis Variab	Analysis Variable : booksRead					
Mean	Std Dev					
5.0000000	3.4928498					

Obs	gender	_TYPE_	_FREQ_	average	stddev
1	f	0	13	4.3076923077	2.2870874996
2	m	0	11	5	3.4928498393





Frequency Percent Row Pct Col Pct

Table of age by booksRead						
	bo	booksRead				
age	Less_than_5 5_or_more		Total			
Under_30	9	6	15			
_	37.50	25.00	62.50			
	60.00	40.00				
	64.29	60.00				
30_and_above	5	4	9			
	20.83	16.67	37.50			
	55.56	44.44				
	35.71	40.00				
Total	14	10	24			
	58.33	41.67	100.00			

## **Assignment 6**

Obs	data
1	14
2	22
3	16
4	16
5	23
6	43
7	10
8	5
9	21

## **Assignment 6**

### The MEANS Procedure

Analysis Variable : data							
Mean	Std Dev	Upper 90% CL for Mean					
18.8888889	10.7522607	23.8951964					

## **Assignment 6**

Obs	alpha	df	tCritical	tCritical2	zCritical2	percentiletT
1	0.1	8	1.39682	1.39682	1.28155	0.90000

## **Assignment 6**

Obs	lim
1	23.8952

Obs	Month	Day	Year	Open	High	Low	Close	Adj_close	volumn	Date	Daily_Return
1	9	10	2021	4506.92	4520.47	4457.66	4458.58	4458.58	2851140000	22533	-0.010726
2	9	9	2021	4513.02	4529.90	4492.07	4493.28	4493.28	3035300000	22532	-0.004374
3	9	8	2021	4518.09	4521.79	4493.95	4514.07	4514.07	2808480000	22531	-0.000890
4	9	7	2021	4535.38	4535.38	4513.00	4520.03	4520.03	3098870000	22530	-0.003385
5	9	3	2021	4532.42	4541.45	4521.30	4535.43	4535.43	2609660000	22526	0.000664

Obs	Month	Day	Year	Open	High	Low	Close	Adj_close	volumn	Date	Daily_Return
6	9	2	2021	4534.48	4545.85	4524.66	4536.95	4536.95	2897010000	22525	0.000545
7	9	1	2021	4528.80	4537.11	4522.02	4524.09	4524.09	3101830000	22524	-0.001040
8	8	31	2021	4529.75	4531.39	4515.80	4522.68	4522.68	3090380000	22523	-0.001561
9	8	30	2021	4513.76	4537.36	4513.76	4528.79	4528.79	2557300000	22522	0.003330
10	8	27	2021	4474.10	4513.33	4474.10	4509.37	4509.37	2862360000	22519	0.007883
11	8	26	2021	4493.75	4495.90	4468.99	4470.00	4470.00	2704600000	22518	-0.005285
12	8	25	2021	4490.45	4501.71	4485.66	4496.19	4496.19	2554680000	22517	0.001278
13	8	24	2021	4484.40	4492.81	4482.28	4486.23	4486.23	3037770000	22516	0.000408
14	8	23	2021	4450.29	4489.88	4450.29	4479.53	4479.53	2965520000	22515	0.006570
15	8	20	2021	4410.56	4444.35	4406.80	4441.67	4441.67	2867770000	22512	0.007054
16	8	19	2021	4382.44	4418.61	4367.73	4405.80	4405.80	3120840000	22511	0.005330
17	8	18	2021	4440.94	4454.32	4397.59	4400.27	4400.27	2965210000	22510	-0.009158
18	8	17	2021	4462.12	4462.12	4417.83	4448.08	4448.08	2884000000	22509	-0.003146
19	8	16	2021	4461.65	4473.26	4437.66	4472.94	4472.94	2707170000	22508	0.002530
20	8	13	2021	4464.84	4468.37	4460.82	4468.00	4468.00	2371630000	22505	0.000708
21	8	12	2021	4446.08	4461.77	4435.96	4460.83	4460.83	2543860000	22504	0.003318
22	8	11	2021	4442.18	4449.44	4436.42	4442.41	4442.41	2803060000	22503	0.000052

#### The MEANS Procedure

Analysis Variable : Daily_Return							
Mean	Std Dev	Lower 90% CL for Mean	Upper 90% CL for Mean				
4.7963922E-6	0.0048139	-0.0017613	0.0017709				

## Assignment 7 Task1 Test

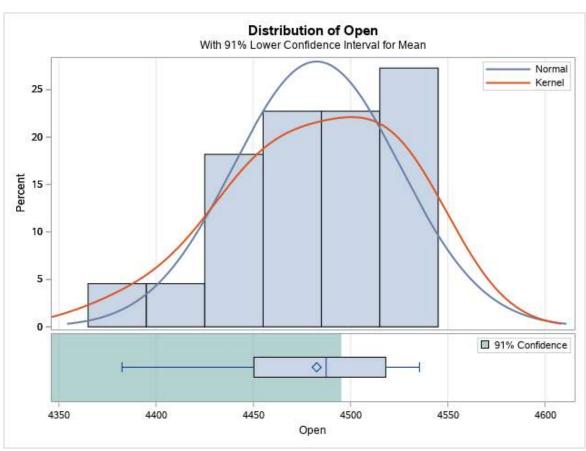
## The TTEST Procedure

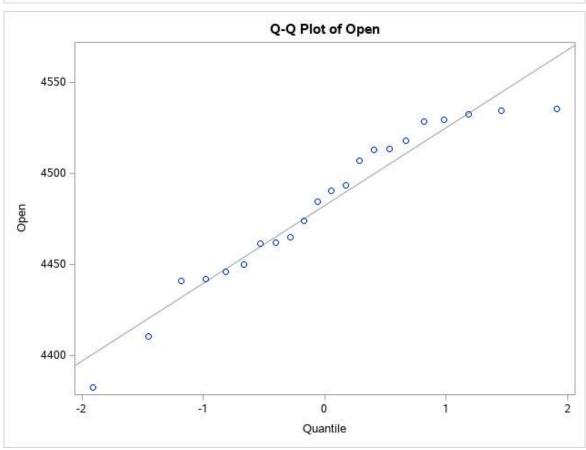
Variable: Open

N	Mean	Std Dev	Std Err	Minimum	Maximum
22	4482.6	42.7997	9.1249	4382.4	4535.4

Mean	91% C	L Mean	Std Dev	91% CL Std Dev		
4482.6	-Infty	4495.2	42.7997	34.0850	58.1560	

DF	t Value	Pr < t
21	-1.91	0.0349





Obs	Tvalue
1	-1.90687

## Task1 Part B Output

Obs	Pvalue
1	0.035156

Task2 Test

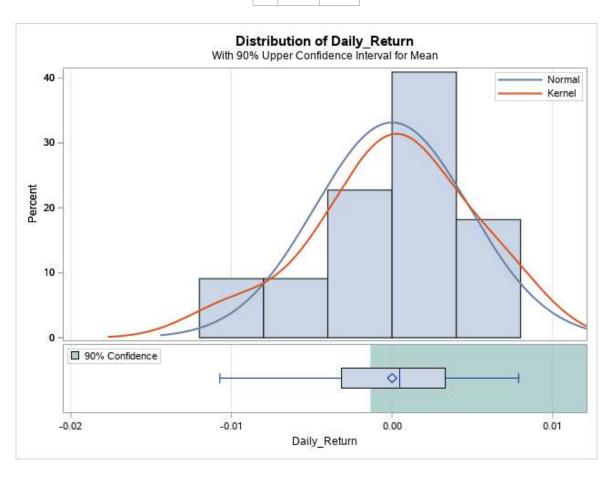
#### The TTEST Procedure

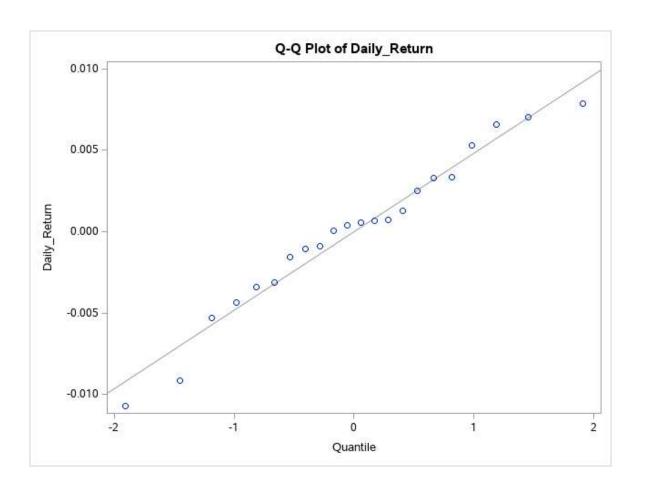
Variable: Daily\_Return

N	Mean	Std Dev	Std Err	Minimum	Maximum
22	4.796E-6	0.00481	0.00103	-0.0107	0.00788

Mean	90% CL I	/lean	Std Dev	90% CL	Std Dev
4.796E-6	-0.00135	Infty	0.00481	0.00386	0.00648

DF	t Value	Pr > t
21	0.00	0.4982





Task2 Part A Output

Obs	Tvalue
1	.004656311

Task2 Part B Output

Obs	Pvalue
1	0.50184

Task3 Test

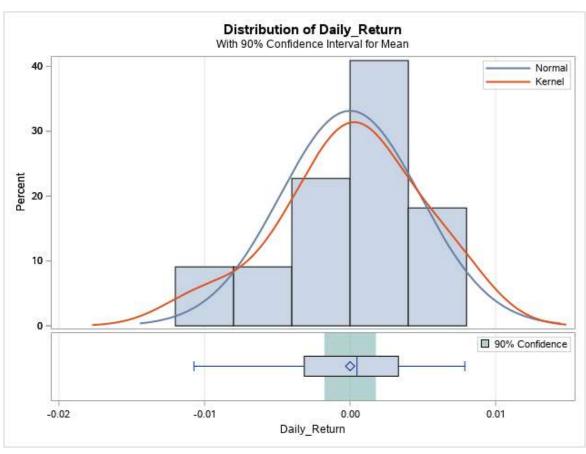
The TTEST Procedure

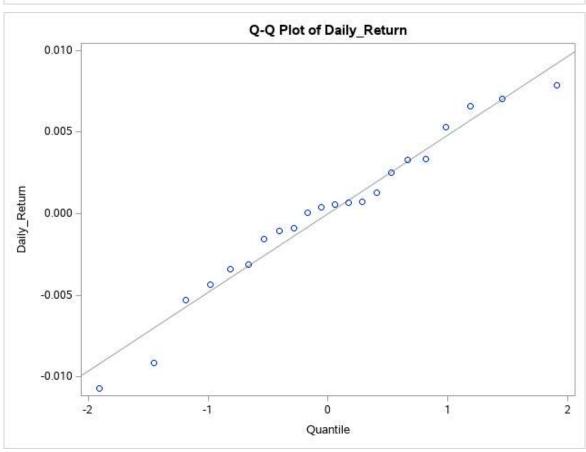
Variable: Daily\_Return

N	Mean	Std Dev	Std Err	Minimum	Maximum
22	4.796E-6	0.00481	0.00103	-0.0107	0.00788

Mean	90% CL	. Mean	Std Dev	90% CL	Std Dev
4.796E-6	-0.00176	0.00177	0.00481	0.00386	0.00648

DF	t Value	Pr >  t
21	0.00	0.9963





Analysis Variable : yield				
density	N Obs	Mean		
1	48	176.7844977		
2	48	177.2464538		

T-Test Part 1

### The TTEST Procedure

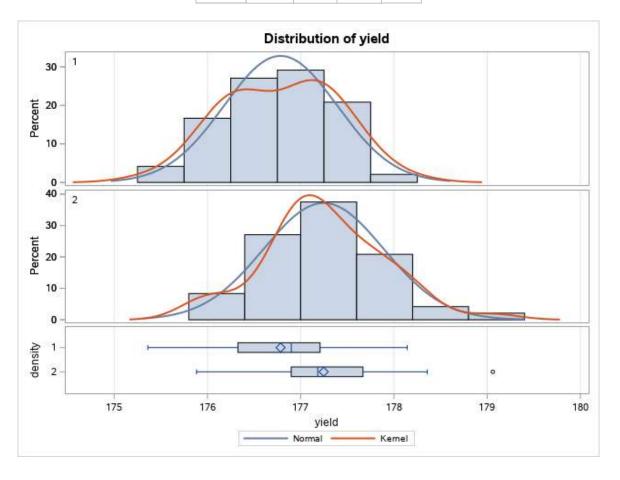
### Variable: yield

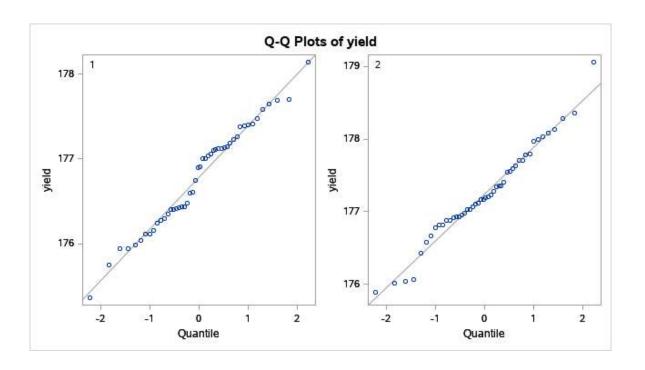
density	Method	N	Mean	Std Dev	Std Err	Minimum	Maximum
1		48	176.8	0.6072	0.0876	175.4	178.1
2		48	177.2	0.6441	0.0930	175.9	179.1
Diff (1-2)	Pooled		-0.4620	0.6260	0.1278		
Diff (1-2)	Satterthwaite		-0.4620		0.1278		

density	Method	Mean	95% C	_ Mean	Std Dev	95% CL	Std Dev
1		176.8	176.6	177.0	0.6072	0.5055	0.7606
2		177.2	177.1	177.4	0.6441	0.5362	0.8068
Diff (1-2)	Pooled	-0.4620	-0.7157	-0.2083	0.6260	0.5479	0.7303
Diff (1-2)	Satterthwaite	-0.4620	-0.7157	-0.2082			

Method	Variances	DF	t Value	Pr >  t
Pooled	Equal	94	-3.62	0.0005
Satterthwaite	Unequal	93.675	-3.62	0.0005

Equality of Variances						
Method	Num DF	Den DF	F Value	Pr > F		
Folded F	47	47	1.13	0.6876		





### **ANOVA Part 2**

#### The ANOVA Procedure

Class Level Information				
Levels	Values			

fertilizer	3	123	
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	Number of Observations Read	96
ı	Number of Observations Used	96

### **ANOVA Part 2**

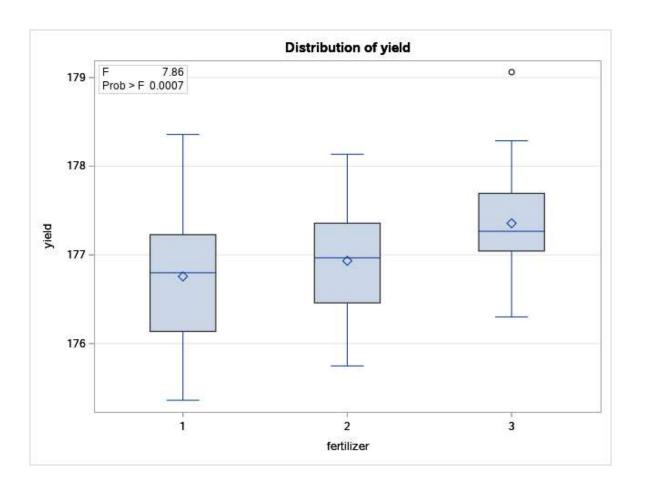
### The ANOVA Procedure

#### Dependent Variable: yield

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	6.06804665	3.03402332	7.86	0.0007
Error	93	35.88618614	0.38587297		
Corrected Total	95	41.95423279			

R-Square	Coeff Var	Root MSE	yield Mean
0.144635	0.350922	0.621187	177.0155

Source	DF	Anova SS	Mean Square	F Value	Pr > F
fertilizer	2	6.06804665	3.03402332	7.86	0.0007



**Tukey Part 3** 

### The ANOVA Procedure

Class Level Information					
Class	Levels	Values			
fertilizer	3	123			

Number of Observations Read	96
Number of Observations Used	96

## **Tukey Part 3**

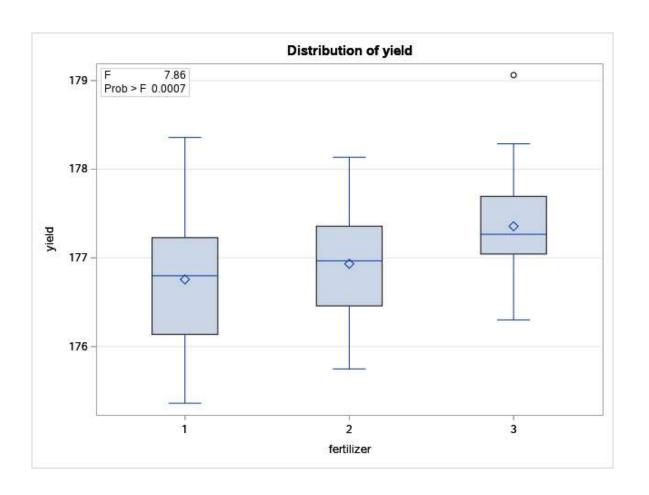
#### The ANOVA Procedure

## Dependent Variable: yield

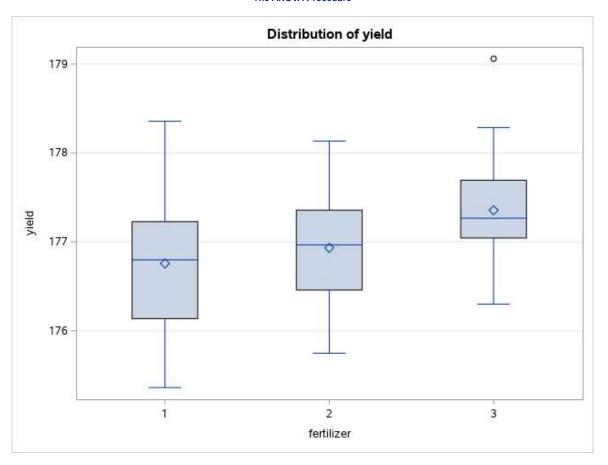
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	6.06804665	3.03402332	7.86	0.0007
Error	93	35.88618614	0.38587297		
Corrected Total	95	41.95423279			

R-Square	Coeff Var	Root MSE	yield Mean
0.144635	0.350922	0.621187	177.0155

Source	DF	Anova SS	Mean Square	F Value	Pr > F
fertilizer	2	6.06804665	3.03402332	7.86	0.0007



Tukey Part 3
The ANOVA Procedure



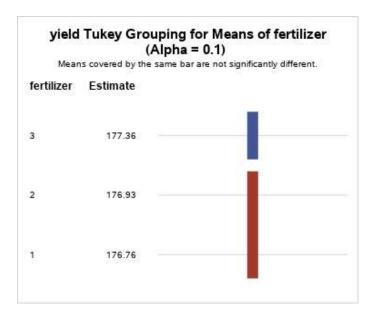
#### **Tukey Part 3**

#### The ANOVA Procedure

### Tukey's Studentized Range (HSD) Test for yield

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

Alpha	0.1
Error Degrees of Freedom	93
Error Mean Square	0.385873
Critical Value of Studentized Range	2.93863
Minimum Significant Difference	0.3227



#### **Assignment 9**

The REG Procedure Model: MODEL1 Dependent Variable: PRICE

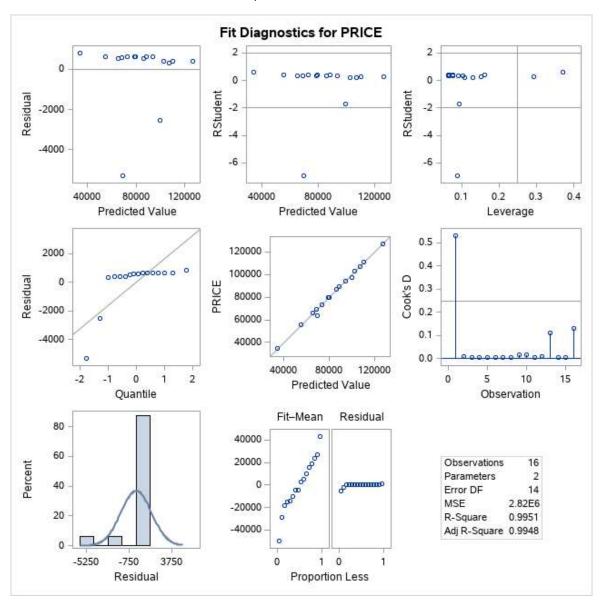
Number of Observations Read	16
Number of Observations Used	16

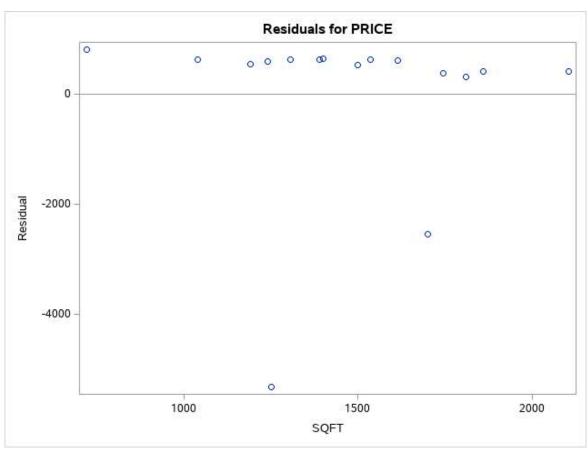
		/ariance			
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	8072948929	8072948929	2867.21	<.0001
Error	14	39418571	2815612		
Corrected Total	15	8112367500			

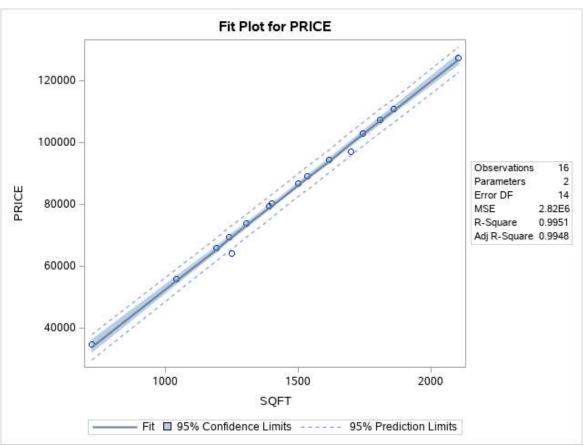
Root MSE	1677.97862	R-Square	0.9951
Dependent Mean	83613	Adj R-Sq	0.9948
Coeff Var	2.00685		

Parameter Estimates						
Variable DF		Parameter Estimate	Standard Error	t Value	Pr >  t	
Intercept	1	-14614	1881.77979	-7.77	<.0001	
SQFT	1	67.14926	1.25404	53.55	<.0001	

The REG Procedure Model: MODEL1 Dependent Variable: PRICE







Variable	Mean
SQFT	1462.81
PRICE	83612.50

Obs	_TYPE_	_FREQ_	meanx	meany
1	0	16	1462.8125	83612.5

### **Assignment 9**

### The MEANS Procedure

Variable	Sum
xi_xbar2 vi_vbar2	1790398.44 8112367500
xi_yi_bar	120223938

## Assignment 9

Obs	_TYPE_	_FREQ_	Sxx	Syy	Sxy
1	0	16	1790398.44	8112367500	120223937.5

### **Calculated Parameters Part 1a**

I	Obs	b1	b0
1	1	67.1493	-14614.11

## **Utility Test Part 1b**

Obs	teststat	df	prob_greater_than_t	pval	alpha
1	53.5463	14	0	0	0.05

### Task 2

## The ANOVA Procedure

	Cla	ass Level Information
Class	Levels	Values
STYLE	4	CONDO RANCH SPLIT TWOSTORY

Number of Observations Read	16
Number of Observations Used	16

#### Task 2

### The ANOVA Procedure

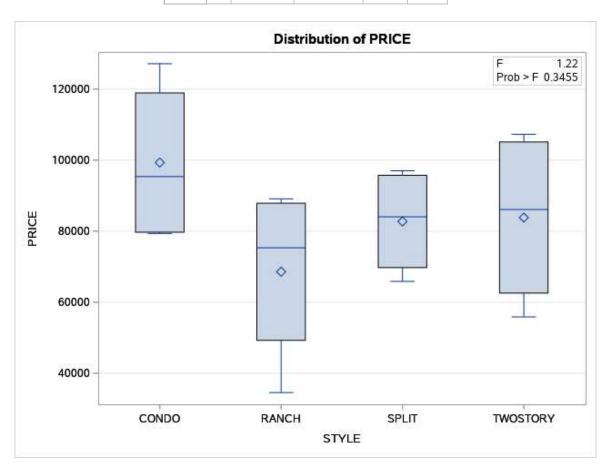
## Dependent Variable: PRICE

Source D		Sum of Squares	Mean Square	F Value	Pr > F
Model	3	1893708750	631236250	1.22	0.3455
Error	12	6218658750	518221563		

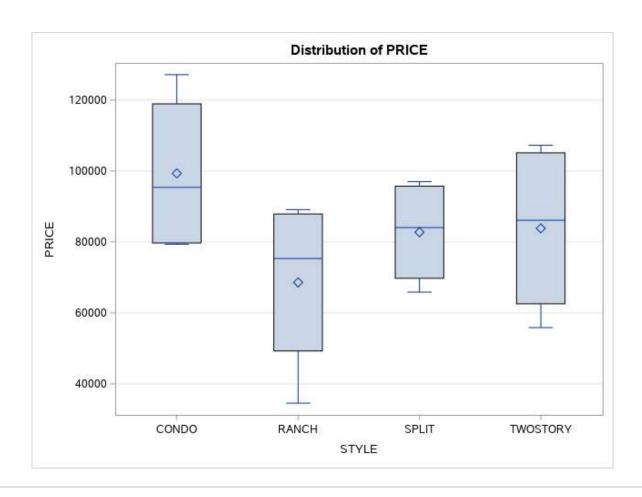
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Corrected Total	15	8112367500			

R-Square	Coeff Var	Root MSE	PRICE Mean
0.233435	27.22617	22764.48	83612.50

Source	DF	Anova SS	Mean Square	F Value	Pr > F
STYLE	3	1893708750	631236250	1.22	0.3455



Task 2
The ANOVA Procedure



Task 2
The ANOVA Procedure

### Tukey's Studentized Range (HSD) Test for PRICE

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

Alpha	0.05
Error Degrees of Freedom	12
Error Mean Square	5.1822E8
Critical Value of Studentized Range	4.19851
Minimum Significant Difference	47788

