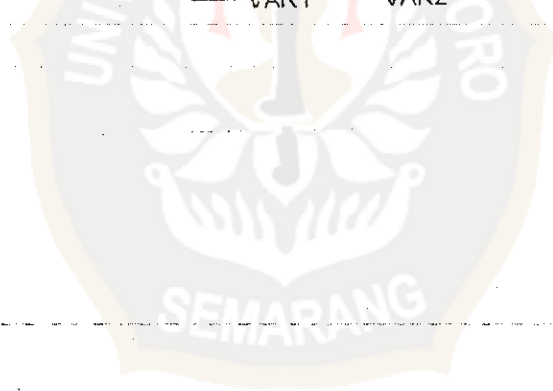
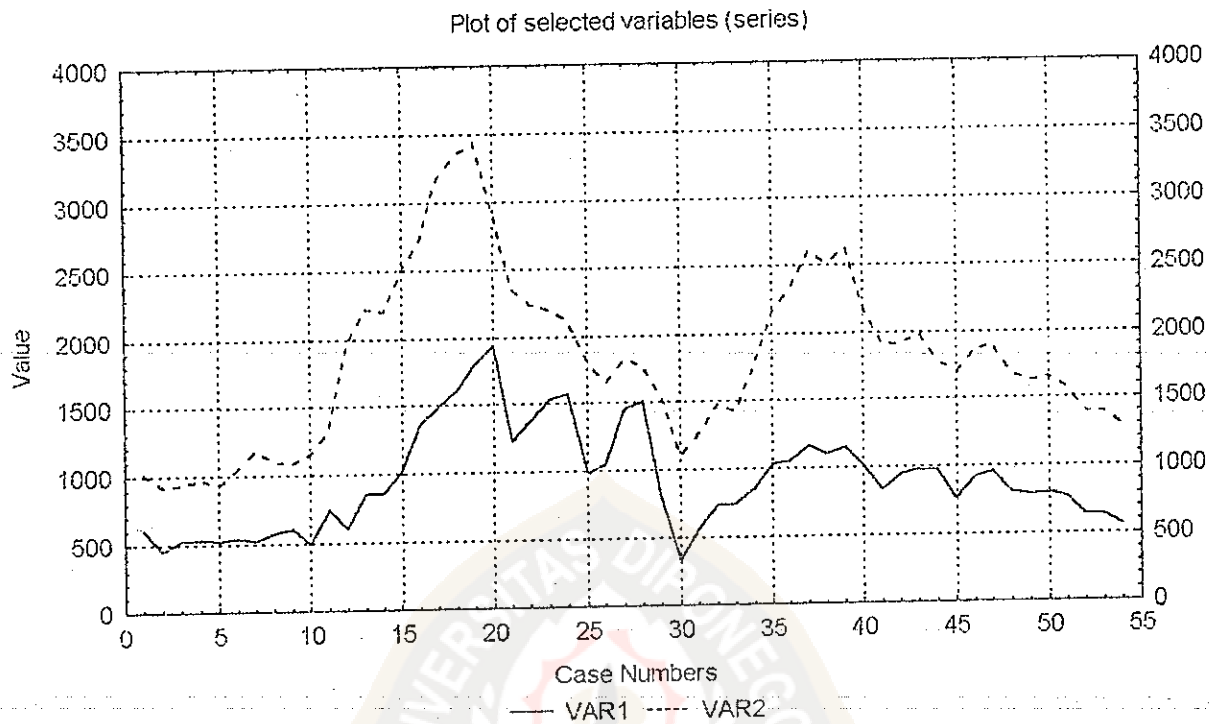


Lampiran 1. Data Lydia Pinkham

Tahun	Variabel 1 : Biaya Promosi	Variabel 2 : Hasil Penjualan	Tahun	Variabel 1 : Biaya Promosi	Variabel 2 : Hasil Penjualan
1907	608	1016	1934	504	1770
1908	451	921	1935	807	1518
1909	529	934	1936	339	1103
1910	543	976	1937	562	1266
1911	525	930	1938	745	1473
1912	549	1052	1939	749	1423
1913	525	1184	1940	862	1767
1914	578	1089	1941	1043	2161
1915	609	1087	1942	1054	2336
1916	504	1154	1943	1164	2602
1917	752	1330	1944	1102	2518
1918	613	1980	1945	1145	2637
1919	862	2223	1946	1012	2177
1920	866	2203	1947	836	1920
1921	1016	2514	1948	941	1610
1922	1360	2726	1949	981	1984
1923	1482	3185	1950	974	1787
1924	1608	3351	1951	766	1689
1925	1800	3438	1952	920	1866
1926	1941	2917	1953	964	1896
1927	1229	2359	1954	811	1684
1928	1373	2240	1955	789	1633
1929	1531	2196	1956	802	1657
1930	1568	2111	1957	770	1569
1931	983	1806	1958	639	1390
1932	1046	1644	1959	644	1387
1933	1453	1814	1960	564	1289

Sumber : Wei, Willcam, W.S. (1990), Time Series Analysis Univariat And Multivariat Methods, Data Lydia Pinkham (1907-1960).

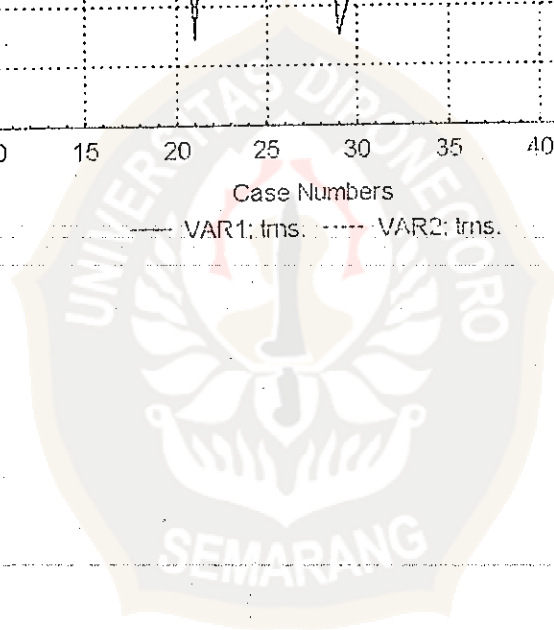
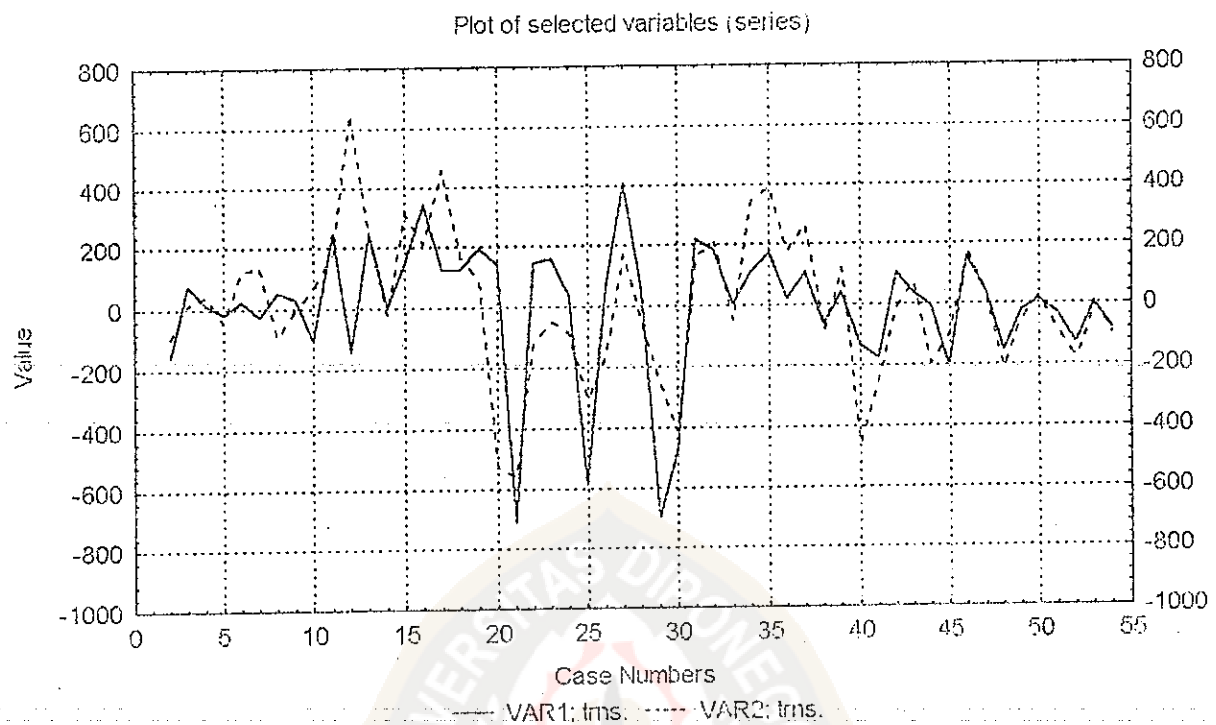
## Lampiran 2. Plot data Lydia Pinkham



Lampiran 3. Data differensi Lydia Pinkham

Var 1 : Biaya Promosi		Var 2 : Hasil Penjualan	
-157	-697	-95	-252
78	-468	13	-415
14	223	42	163
-18	183	-46	207
24	4	122	-50
-24	113	132	344
53	172	-95	394
31	20	-2	175
-105	110	67	266
248	-62	176	-84
-139	43	650	119
249	-133	243	-460
4	-176	-20	-257
150	105	311	-10
344	40	212	74
122	-7	459	-197
126	-208	166	-98
192	154	87	177
141	44	-521	30
-712	-153	-558	-212
144	-22	-119	-51
158	13	-44	24
37	-32	-85	-88
-585	-131	-305	-179
63	5	-162	-3
407	-80	170	-98
51		-44	

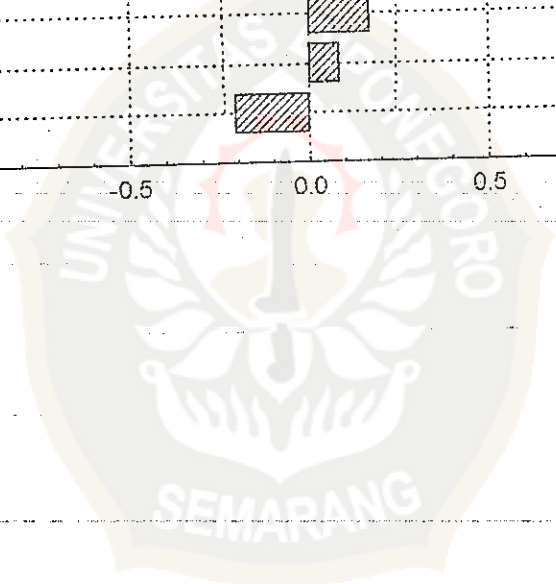
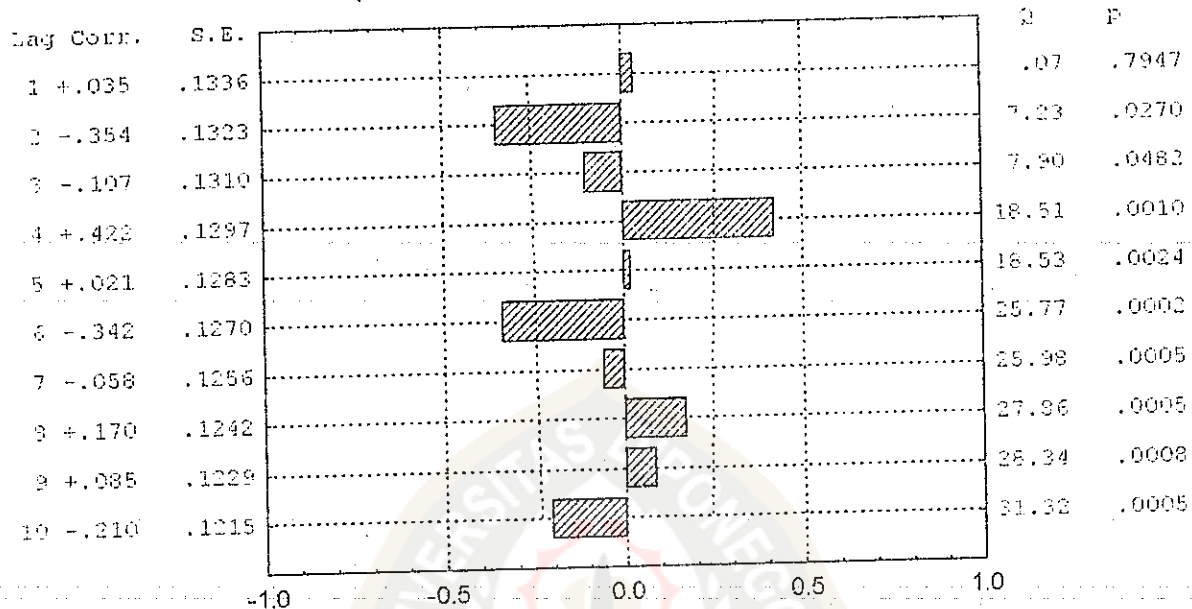
#### Lampiran 4. Plot data differensi Lydia Pinkham



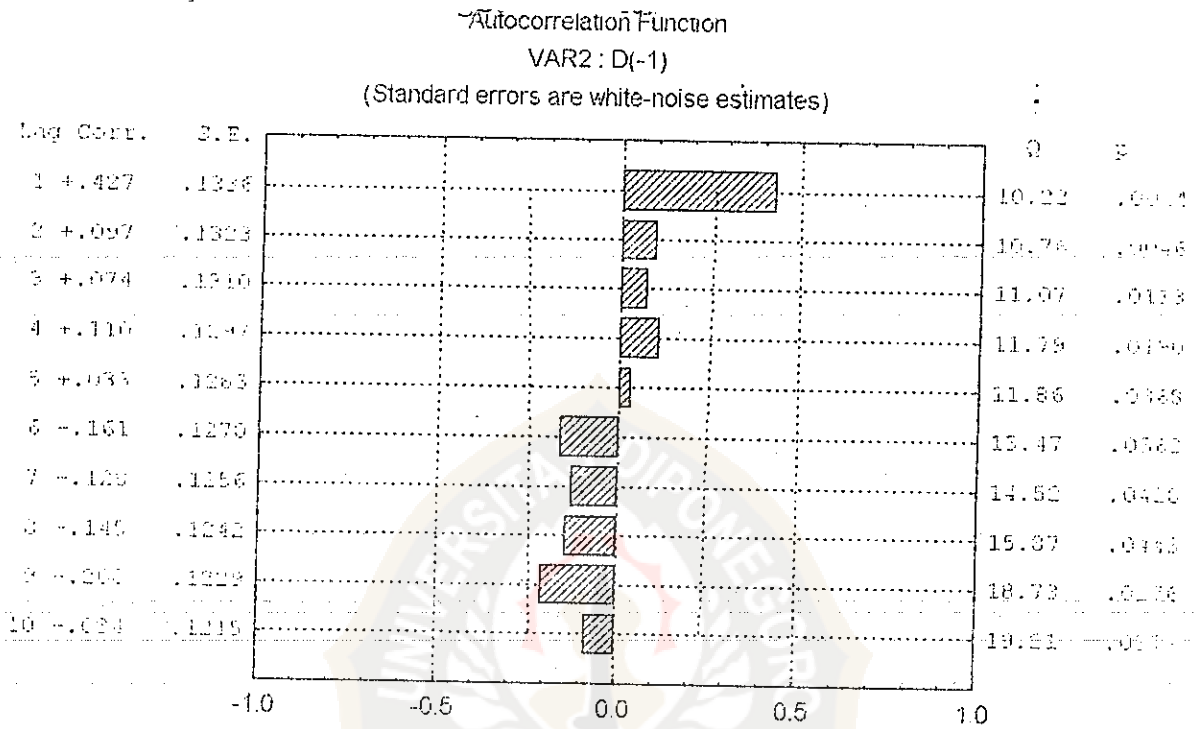
Lampiran 5. Plot fungsi autokorelasi data differensi var 1

10/10/2023

Autocorrelation Function  
 VAR1 : D(-1)  
 (Standard errors are white-noise estimates)

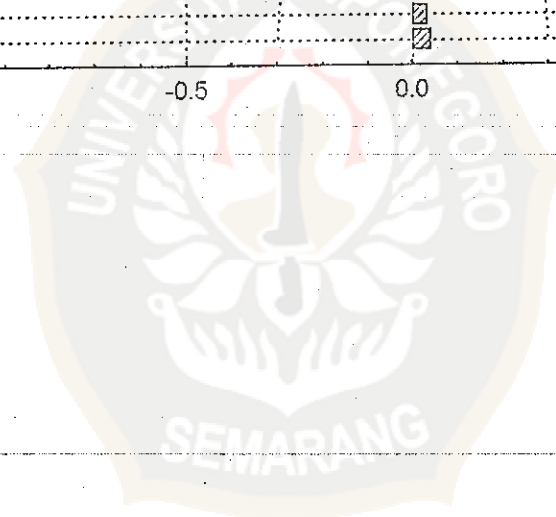
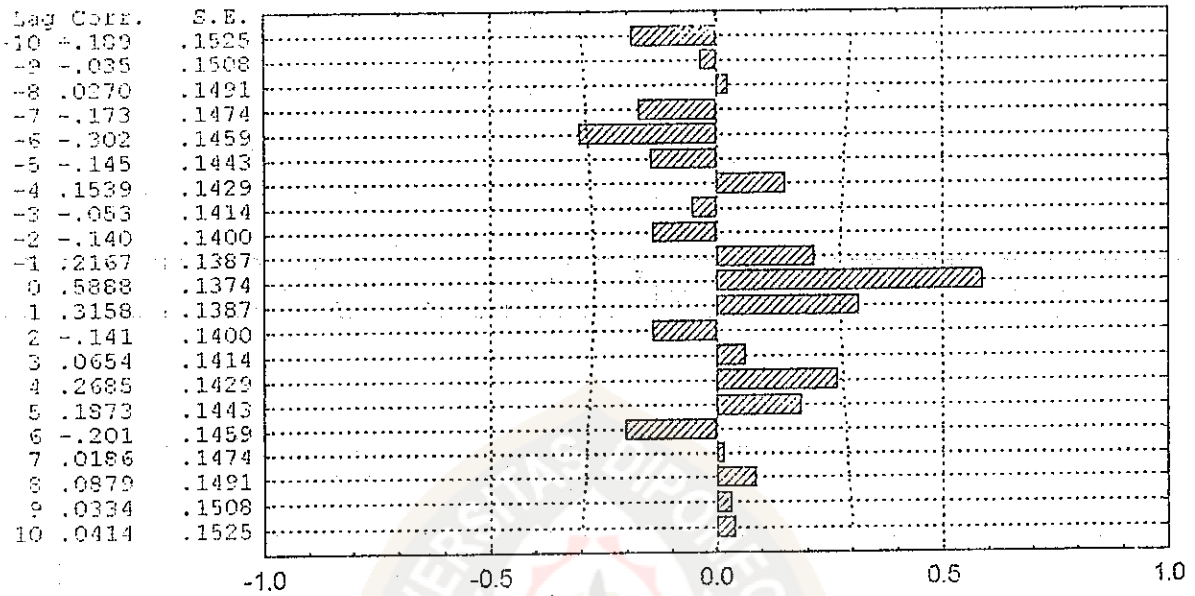


Lampiran 6. Plot fungsi autokorelasi data differensi var 2



Lampiran 7. Plot fungsi korelasi silang data differensi var 1 dan var 2

First : VAR1 : D(-1)  
Lagged: VAR2 : D(-1)



## Lampiran 8. Output program SAS

The SAS System  
 William Wei, W13  
 Automatically Selected Model  
 14:06 Thursday, June 11, 19

STATESPACE Procedure

Nobs = 53

Variable	Mean	Std
XT	31.77358	247.4985
YT	-27.2642	203.8194

### Information Criterion for Autoregressive Models

Lag=0	Lag=1	Lag=2	Lag=3
1147.056041	1131.957251	1138.194898	1142.661622
Lag=4	Lag=5	Lag=6	Lag=7
1147.040085	1151.119266	1157.176625	1163.881568
Lag=8	Lag=9	Lag=10	
1170.245462	1176.382756	1170.735886	

### Schematic Representation of Correlations

Name/Lag	0	1	2	3	4	5	6	7	8	9	10
XT	+	+	.	.	.	.	.	.	.	.	.
YT	.	+	+	.	.	.	.	.	.	.	.

+ is  $> 2 \times \text{std error}$ , - is  $< -2 \times \text{std error}$ , . is between

### Schematic Representation of Partial Autocorrelations

Name/Lag	1	2	3	4	5	6	7	8	9	10
XT	+	.	.	.	.	.	.	.	.	.
YT	.	+	.	.	.	.	.	.	.	.

+ is  $> 2 \times \text{std error}$ , - is  $< -2 \times \text{std error}$ , . is between

### Yule-Walker Estimates for the Min AIC

	Lag=1	
	XT	YT
XT	0.41386	0.04641
YT	-0.00759	0.46751