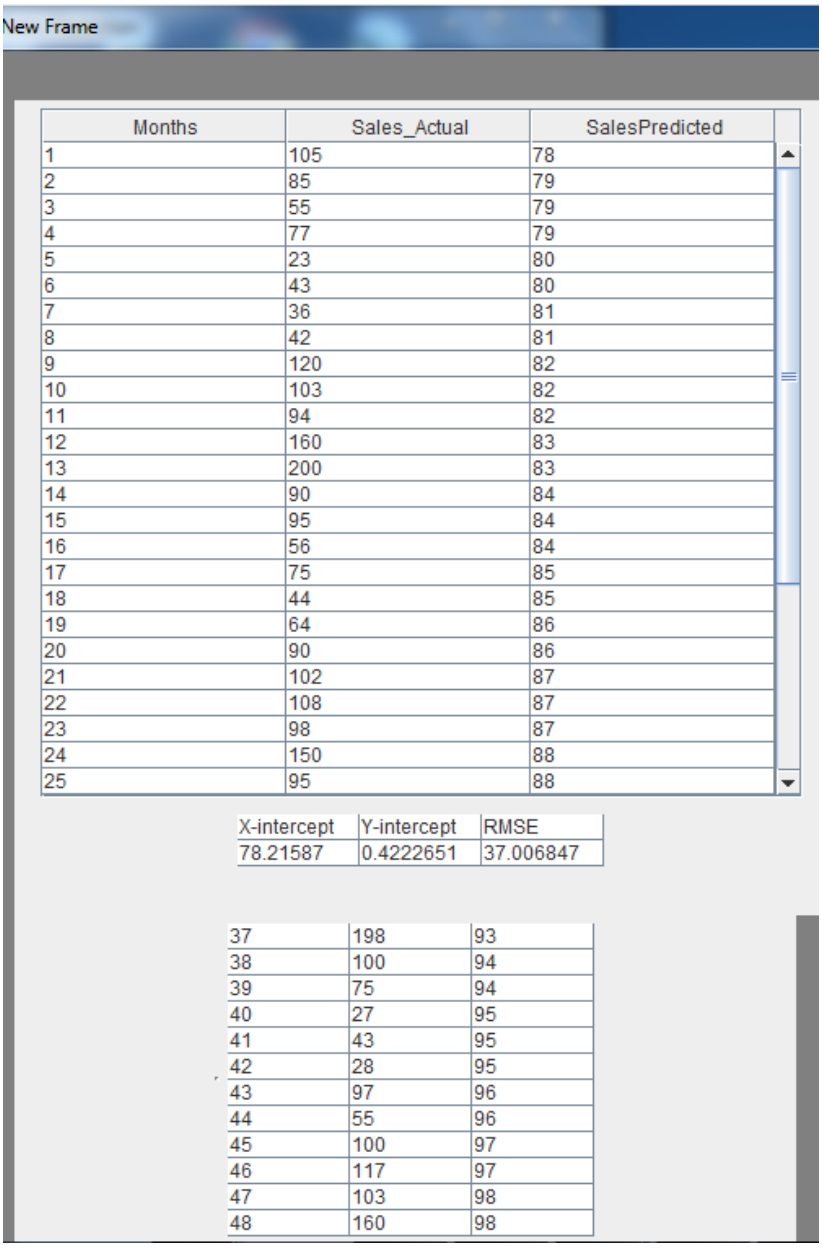
5.3 Dataset Result and Analysis

EXPERIMENT 1 THIS EXPERIMENT WAS PERFORMED USING DATASET 1 AND LINEAR REGRESSION. THE RESULT OBTAINED ARE SHOWN IN FIG…



Months	Sales_Actual	SalesPredicted
1	105	78
2	85	79
3	55	79
4	77	79
5	23	80
6	43	80
7	36	81
8	42	81
9	120	82
10	103	82
11	94	82
12	160	83
13	200	83
14	90	84
15	95	84
16	56	84
17	75	85
18	44	85
19	64	86
20	90	86
21	102	87
22	108	87
23	98	87
24	150	88
25	95	88

X-intercept	Y-intercept	RMSE
78.21587	0.4222651	37.006847

37	198	93
38	100	94
39	75	94
40	27	95
41	43	95
42	28	95
43	97	96
44	55	96
45	100	97
46	117	97
47	103	98
48	160	98

Figure 5-4: Predicted data with RMSE error for dataset1

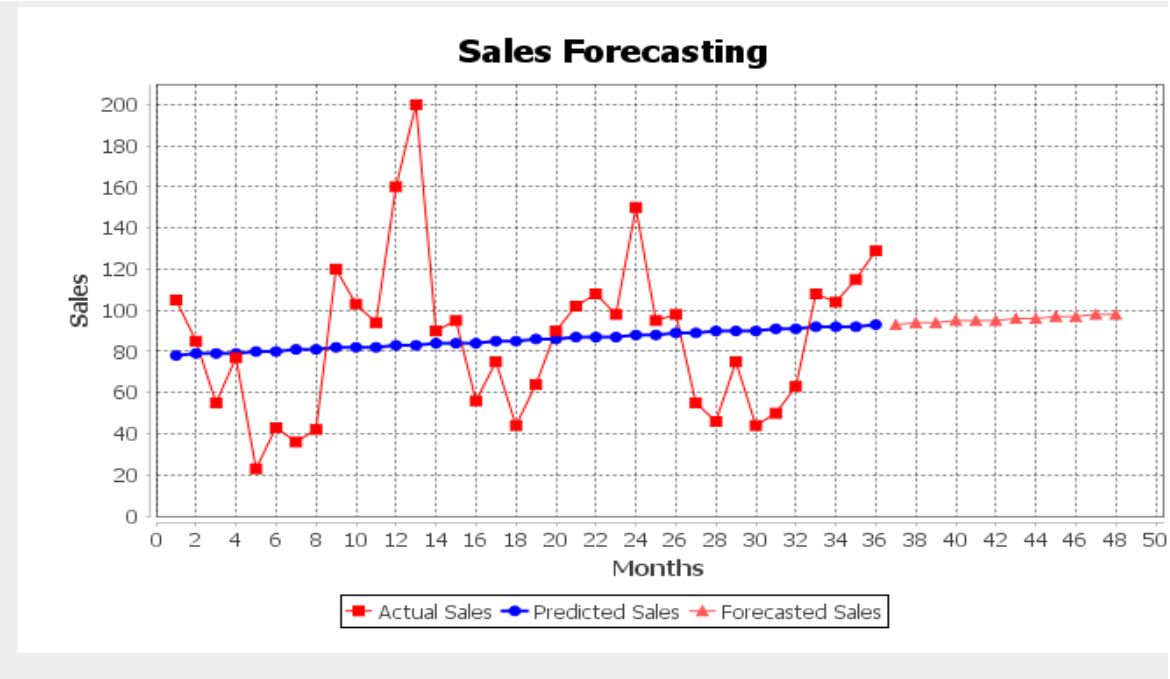


Figure 5-5 : Output graph for dataset 1

EXPERIMENT 2 THIS EXPERIMENT WAS PERFORMED USING DATASET 1 AND (Time Series using moving average). THE RESULT OBTAINED ARE SHOWN IN FIG…

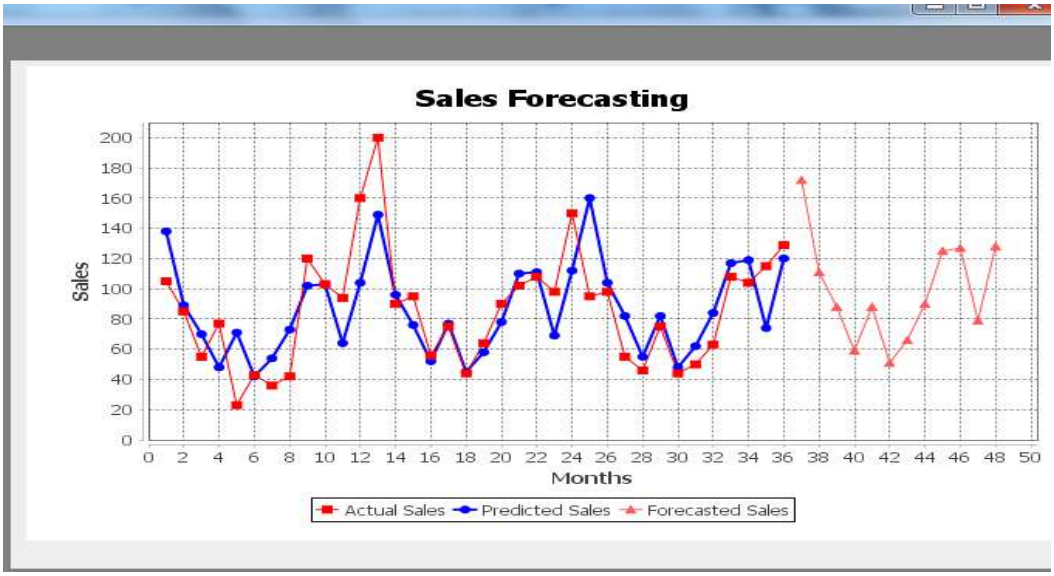


Figure 5-6 : Output graph for dataset 2

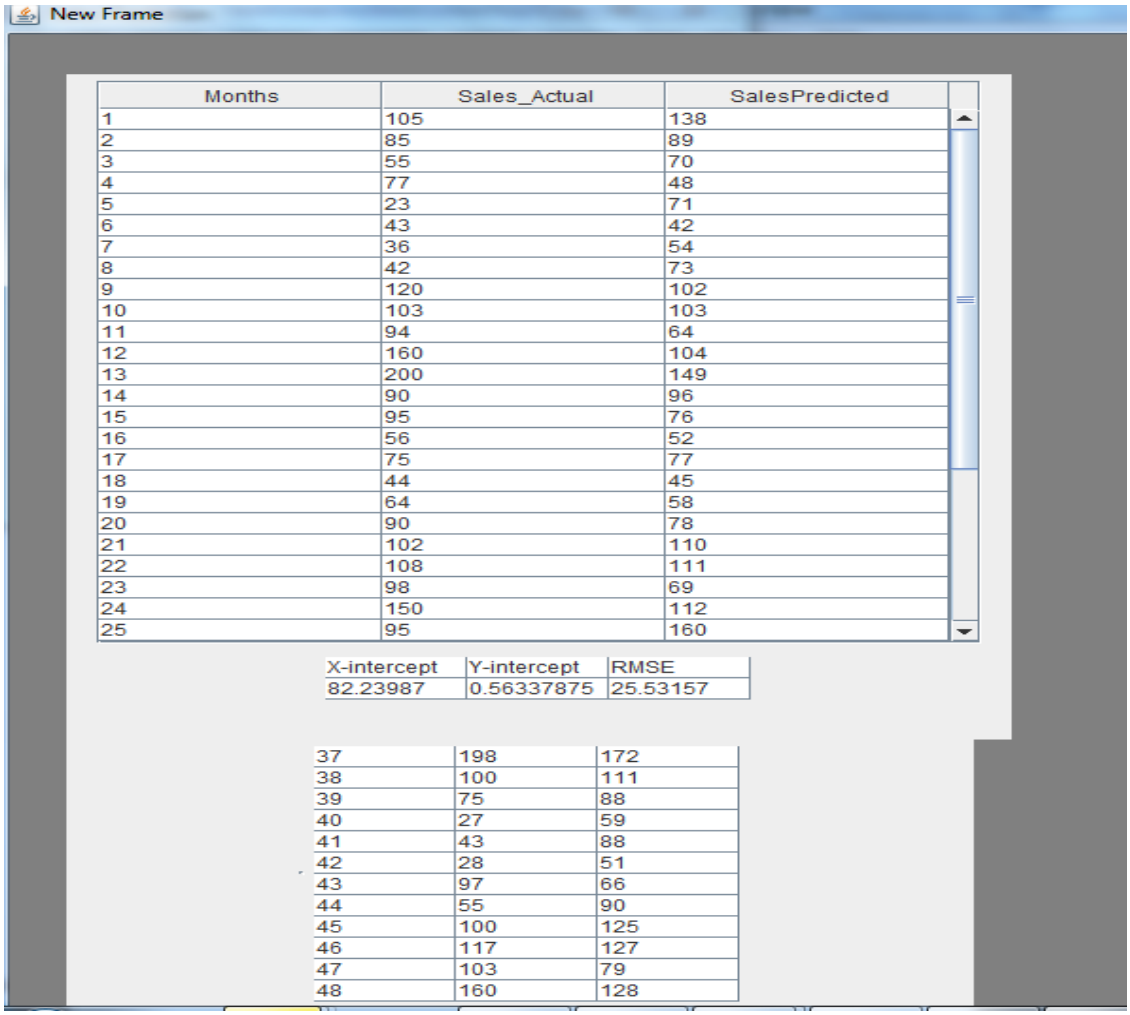


Figure 5-7 : Predicted data with RMSE error

On analyzing result given by above two model , it can be concluded that prediction using Time series forecasting is more convincing and accurate to implement than Linear regression model. The RMSE value obtained by implementing Time Series Forecasting is 25.53157 while the RMSE value obtained by implementing Linear Regression is 37.006847.

Linear Regression Model is easy to implement but is not good for prediction.

OUTPUT

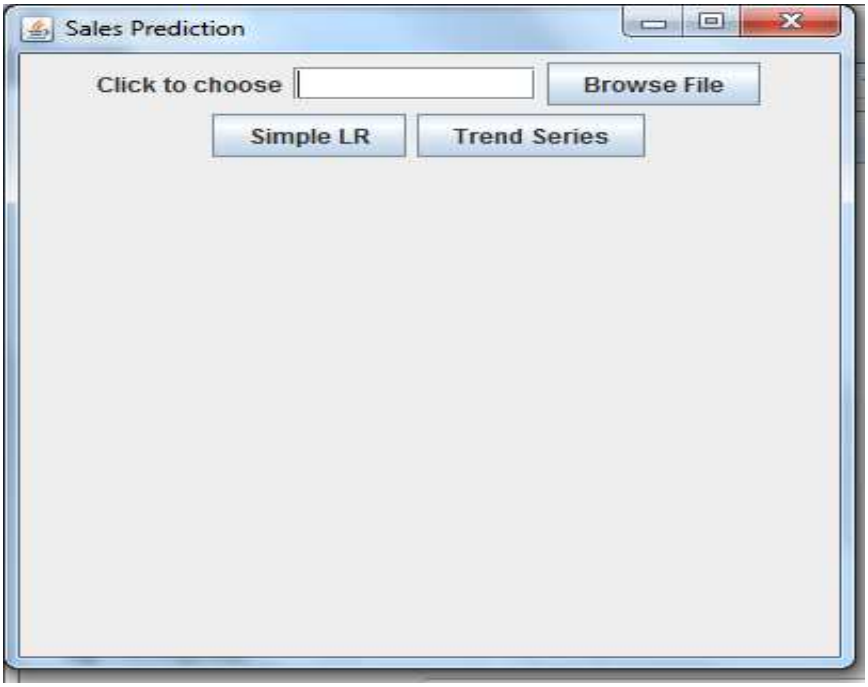


Figure 8 : UI Interface

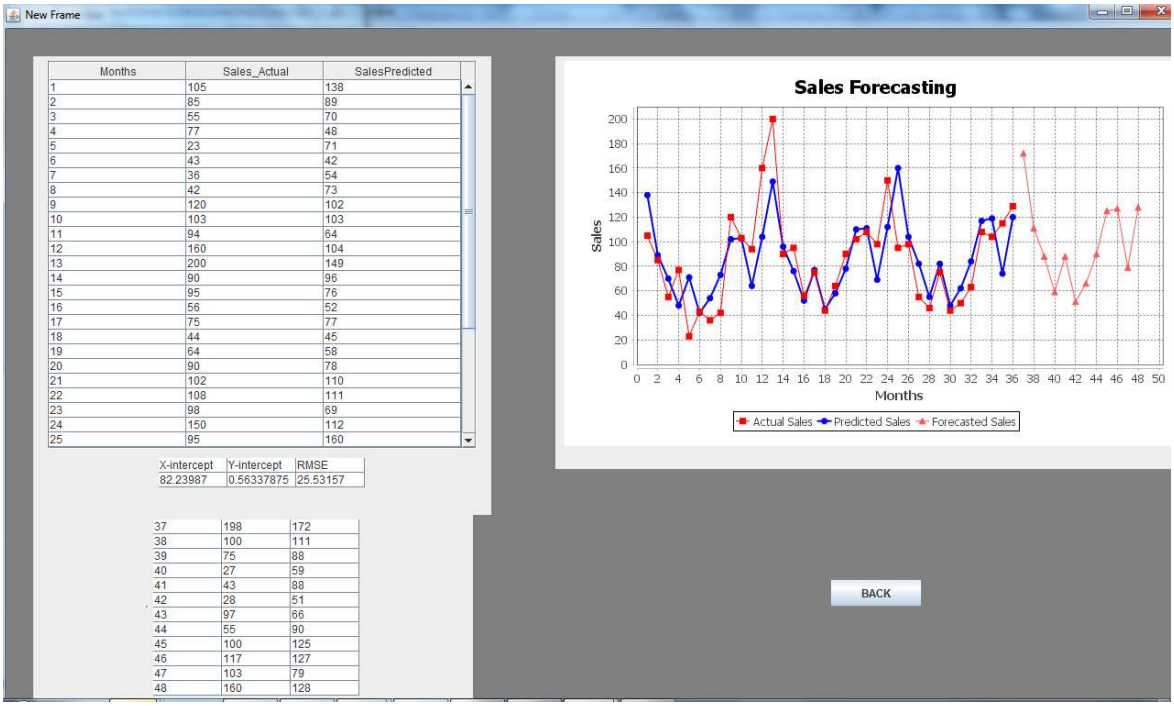


Figure 9 : Prediction Result