

## Report for Logistic Regression Model LM\_Result

### Basic Summary

Call:

```
glm(formula = Credit.Application.Result ~ Payment.Status.of.Previous.Credit + Purpose
+ Type.of.apartment + Value.Savings.Stocks + No.of.Credits.at.this.Bank +
Credit.Amount + Account.Balance + Age.years + Length.of.current.employment +
Most.valuable.available.asset + Duration.of.Credit.Month + Instalment.per.cent, family
= binomial(logit), data = the.data)
```

Deviance Residuals:

Min	1Q	Median	3Q	Max
-2.084	-0.719	-0.429	0.691	2.543

Coefficients:

	Estimate	Std. Error	z value	Pr(> z )
(Intercept)	-2.990817	1.013e+00	-2.9527	0.00315**
Payment.Status.of.Previous.CreditPaid Up	0.402974	3.843e-01	1.0487	0.2943
Payment.Status.of.Previous.CreditSome Problems	1.259683	5.334e-01	2.3616	0.0182*
PurposeNew car	-1.755074	6.278e-01	-2.7954	0.00518**
PurposeOther	-0.290165	8.359e-01	-0.3471	0.72848
PurposeUsed car	-0.785627	4.124e-01	-1.9049	0.05679.
Type.of.apartment	-0.254565	2.958e-01	-0.8605	0.38949
Value.Savings.StocksNone	0.609298	5.099e-01	1.1949	0.23213
Value.Savings.Stocks£100-£1000	0.172241	5.649e-01	0.3049	0.76046
No.of.Credits.at.this.BankMore than 1	0.362688	3.816e-01	0.9505	0.34184
Credit.Amount	0.000177	6.841e-05	2.5879	0.00966**
Account.BalanceSome Balance	-1.543669	3.233e-01	-4.7745	1.80e-06***
Age.years	-0.015092	1.539e-02	-0.9809	0.32666
Length.of.current.employment4-7 yrs	0.530959	4.932e-01	1.0767	0.28163
Length.of.current.employment< 1yr	0.777372	3.957e-01	1.9646	0.04946*
Most.valuable.available.asset	0.325606	1.557e-01	2.0918	0.03645*
Duration.of.Credit.Month	0.006391	1.371e-02	0.4660	0.6412
Instalment.per.cent	0.310524	1.399e-01	2.2197	0.02644*

Significance codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial taken to be 1)

Null deviance: 413.16 on 349 degrees of freedom

Residual deviance: 322.19 on 332 degrees of freedom

McFadden R-Squared: 0.2202, AIC: 358.2

Number of Fisher Scoring iterations: 5

### Type II Analysis of Deviance Tests

Response: Credit.Application.Result

	LR Chi-Sq	DF	Pr(>Chi-Sq)
Payment.Status.of.Previous.Credit	5.741	2	0.05667.
Purpose	12.494	3	0.00587**
Type.of.apartment	0.739	1	0.38997

	LR Chi-Sq	DF	Pr(>Chi-Sq)
Value.Savings.Stocks	2.738	2	0.25437
No.of.Credits.at.this.Bank	0.908	1	0.34072
Credit.Amount	7.489	1	0.00621**
Account.Balance	25.5	1	4.42e-07***
Age.years	0.984	1	0.32119
Length.of.current.employment	4.139	2	0.12627
Most.valuable.available.asset	4.474	1	0.03442*
Duration.of.Credit.Month	0.216	1	0.64231
Instalment.per.cent	5.131	1	0.0235*

Significance codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

### Basic Diagnostic Plots

