

SAS Output for Assignment G

The REG Procedure
 Model: MODEL1
 Dependent Variable: y

| | |
|--|----|
| Number of Observations Read | 54 |
| Number of Observations Used | 53 |
| Number of Observations with Missing Values | 1 |

| Analysis of Variance | | | | | |
|----------------------|----|----------------|-------------|---------|--------|
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
| Model | 1 | 6833.76632 | 6833.76632 | 123.40 | <.0001 |
| Error | 51 | 2824.30915 | 55.37861 | | |
| Corrected Total | 52 | 9658.07547 | | | |

| | | | |
|----------------|----------|----------|--------|
| Root MSE | 7.44168 | R-Square | 0.7076 |
| Dependent Mean | 71.13208 | Adj R-Sq | 0.7018 |
| Coeff Var | 10.46178 | | |

| Parameter Estimates | | | | | |
|---------------------|----|--------------------|----------------|---------|---------|
| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > t |
| Intercept | 1 | 31.75229 | 3.68942 | 8.61 | <.0001 |
| x | 1 | 11.36780 | 1.02333 | 11.11 | <.0001 |

| Output Statistics | | | | | | | | |
|-------------------|----------|-----------------|----------------|-------------------|-------------|----------------|----------|----------|
| Obs | Variable | Dependent Value | Predicted Mean | Std Error Predict | 95% CL Mean | 95% CL Predict | Residual | |
| 1 | 78.0000 | 81.7706 | 1.4007 | 78.9585 | 84.5827 | 66.5685 | 96.9728 | -3.7706 |
| 2 | 80.0000 | 80.6338 | 1.3329 | 77.9580 | 83.3097 | 65.4563 | 95.8114 | -0.6338 |
| 3 | 76.0000 | 82.9074 | 1.4726 | 79.9511 | 85.8638 | 67.6779 | 98.1369 | -6.9074 |
| 4 | 75.0000 | 77.2235 | 1.1600 | 74.8947 | 79.5523 | 62.1033 | 92.3437 | -2.2235 |
| 5 | 74.0000 | 76.0867 | 1.1153 | 73.8477 | 78.3257 | 60.9801 | 91.1934 | -2.0867 |
| 6 | 56.0000 | 51.0776 | 2.0746 | 46.9126 | 55.2425 | 35.5681 | 66.5871 | 4.9224 |
| 7 | 82.0000 | 76.0867 | 1.1153 | 73.8477 | 78.3257 | 60.9801 | 91.1934 | 5.9133 |
| 8 | 73.0000 | 73.8132 | 1.0503 | 71.7046 | 75.9217 | 58.7253 | 88.9010 | -0.8132 |
| 9 | 68.0000 | 77.2235 | 1.1600 | 74.8947 | 79.5523 | 62.1033 | 92.3437 | -9.2235 |
| 10 | 80.0000 | 76.0867 | 1.1153 | 73.8477 | 78.3257 | 60.9801 | 91.1934 | 3.9133 |
| 11 | 84.0000 | 80.6338 | 1.3329 | 77.9580 | 83.3097 | 65.4563 | 95.8114 | 3.3662 |
| 12 | 67.0000 | 73.8132 | 1.0503 | 71.7046 | 75.9217 | 58.7253 | 88.9010 | -6.8132 |
| 13 | 76.0000 | 77.2235 | 1.1600 | 74.8947 | 79.5523 | 62.1033 | 92.3437 | -1.2235 |
| 14 | 69.0000 | 73.8132 | 1.0503 | 71.7046 | 75.9217 | 58.7253 | 88.9010 | -4.8132 |
| 15 | 53.0000 | 57.8982 | 1.5697 | 54.7468 | 61.0496 | 42.6297 | 73.1668 | -4.8982 |
| 16 | 68.0000 | 80.6338 | 1.3329 | 77.9580 | 83.3097 | 65.4563 | 95.8114 | -12.6338 |
| 17 | 80.0000 | 71.5396 | 1.0229 | 69.4861 | 73.5931 | 56.4593 | 86.6199 | 8.4604 |
| 18 | 57.0000 | 66.9925 | 1.0880 | 64.8082 | 69.1767 | 51.8939 | 82.0911 | -9.9925 |
| 19 | 86.0000 | 74.9499 | 1.0784 | 72.7849 | 77.1150 | 59.8541 | 90.0458 | 11.0501 |
| 20 | 86.0000 | 72.6764 | 1.0316 | 70.6054 | 74.7474 | 57.5937 | 87.7590 | 13.3236 |
| 21 | 84.0000 | 78.3603 | 1.2117 | 75.9276 | 80.7929 | 63.2237 | 93.4968 | 5.6397 |
| 22 | 90.0000 | 77.2235 | 1.1600 | 74.8947 | 79.5523 | 62.1033 | 92.3437 | 12.7765 |
| 23 | 51.0000 | 53.3511 | 1.8992 | 49.5383 | 57.1639 | 37.9325 | 68.7698 | -2.3511 |
| 24 | 72.0000 | 74.9499 | 1.0784 | 72.7849 | 77.1150 | 59.8541 | 90.0458 | -2.9499 |
| 25 | 50.0000 | 57.8982 | 1.5697 | 54.7468 | 61.0496 | 42.6297 | 73.1668 | -7.8982 |
| 26 | 42.0000 | 52.2143 | 1.9862 | 48.2269 | 56.2018 | 36.7516 | 67.6771 | -10.2143 |
| 27 | 85.0000 | 84.0442 | 1.5479 | 80.9367 | 87.1517 | 68.7846 | 99.3037 | 0.9558 |
| 28 | 75.0000 | 74.9499 | 1.0784 | 72.7849 | 77.1150 | 59.8541 | 90.0458 | 0.0501 |
| 29 | 93.0000 | 85.1810 | 1.6261 | 81.9164 | 88.4456 | 69.8886 | 100.4733 | 7.8190 |
| 30 | 91.0000 | 78.3603 | 1.2117 | 75.9276 | 80.7929 | 63.2237 | 93.4968 | 12.6397 |
| 31 | 45.0000 | 52.2143 | 1.9862 | 48.2269 | 56.2018 | 36.7516 | 67.6771 | -7.2143 |
| 32 | 75.0000 | 74.9499 | 1.0784 | 72.7849 | 77.1150 | 59.8541 | 90.0458 | 0.0501 |

| | | | | | | | | |
|----|---------|---------|--------|---------|---------|---------|----------|----------|
| 33 | 55.0000 | 51.0776 | 2.0746 | 46.9126 | 55.2425 | 35.5681 | 66.5871 | 3.9224 |
| 34 | 51.0000 | 52.2143 | 1.9862 | 48.2269 | 56.2018 | 36.7516 | 67.6771 | -1.2143 |
| 35 | 88.0000 | 85.1810 | 1.6261 | 81.9164 | 88.4456 | 69.8886 | 100.4733 | 2.8190 |
| 36 | 66.0000 | 60.1718 | 1.4207 | 57.3196 | 63.0239 | 44.9622 | 75.3814 | 5.8282 |
| 37 | 76.0000 | 87.4545 | 1.7899 | 83.8611 | 91.0480 | 72.0886 | 102.8204 | -11.4545 |
| 38 | 79.0000 | 68.1293 | 1.0573 | 66.0066 | 70.2519 | 53.0394 | 83.2191 | 10.8707 |
| 39 | 51.0000 | 52.2143 | 1.9862 | 48.2269 | 56.2018 | 36.7516 | 67.6771 | -1.2143 |
| 40 | 84.0000 | 82.9074 | 1.4726 | 79.9511 | 85.8638 | 67.6779 | 98.1369 | 1.0926 |
| 41 | 58.0000 | 51.0776 | 2.0746 | 46.9126 | 55.2425 | 35.5681 | 66.5871 | 6.9224 |
| 42 | 53.0000 | 53.3511 | 1.8992 | 49.5383 | 57.1639 | 37.9325 | 68.7698 | -0.3511 |
| 43 | 80.0000 | 84.0442 | 1.5479 | 80.9367 | 87.1517 | 68.7846 | 99.3037 | -4.0442 |
| 44 | 70.0000 | 78.3603 | 1.2117 | 75.9276 | 80.7929 | 63.2237 | 93.4968 | -8.3603 |
| 45 | 74.0000 | 84.0442 | 1.5479 | 80.9367 | 87.1517 | 68.7846 | 99.3037 | -10.0442 |
| 46 | 82.0000 | 84.0442 | 1.5479 | 80.9367 | 87.1517 | 68.7846 | 99.3037 | -2.0442 |
| 47 | 49.0000 | 53.3511 | 1.8992 | 49.5383 | 57.1639 | 37.9325 | 68.7698 | -4.3511 |
| 48 | 79.0000 | 73.8132 | 1.0503 | 71.7046 | 75.9217 | 58.7253 | 88.9010 | 5.1868 |
| 49 | 75.0000 | 70.4028 | 1.0243 | 68.3465 | 72.4592 | 55.3222 | 85.4835 | 4.5972 |
| 50 | 51.0000 | 54.4879 | 1.8138 | 50.8466 | 58.1292 | 39.1107 | 69.8650 | -3.4879 |
| 51 | 82.0000 | 71.5396 | 1.0229 | 69.4861 | 73.5931 | 56.4593 | 86.6199 | 10.4604 |
| 52 | 60.0000 | 74.9499 | 1.0784 | 72.7849 | 77.1150 | 59.8541 | 90.0458 | -14.9499 |
| 53 | 86.0000 | 70.4028 | 1.0243 | 68.3465 | 72.4592 | 55.3222 | 85.4835 | 15.5972 |
| 54 | . | 65.8557 | 1.1272 | 63.5928 | 68.1186 | 50.7455 | 80.9659 | . |

Sum of Residuals 0
Sum of Squared Residuals 2824.30915
Predicted Residual SS (PRESS) 3015.62223

The UNIVARIATE Procedure
Variable: resid (Residual)

| Moments | | | |
|-----------------|------------|------------------|------------|
| N | 53 | Sum Weights | 53 |
| Mean | 0 | Sum Observations | 0 |
| Std Deviation | 7.36977867 | Variance | 54.3136376 |
| Skewness | 0.16045423 | Kurtosis | -0.6220198 |
| Uncorrected SS | 2824.30915 | Corrected SS | 2824.30915 |
| Coeff Variation | . | Std Error Mean | 1.01231695 |

| Tests for Normality | | | |
|---------------------|---------------|-------------------|---------|
| Test | --Statistic-- | -----p Value----- | |
| Shapiro-Wilk | W 0.982978 | Pr < W | 0.6471 |
| Kolmogorov-Smirnov | D 0.082196 | Pr > D | >0.1500 |
| Cramer-von Mises | W-Sq 0.04037 | Pr > W-Sq | >0.2500 |
| Anderson-Darling | A-Sq 0.258133 | Pr > A-Sq | >0.2500 |