Case 1

Objective - To identify the impact of independent variables

Independent Variables - (PromotionalIndex, Feature Advertising)

Dependent variables - Sales

Justification - Since dependent variables and all the independent variables are quantitative in nature so we will use regression analysis.

Data Analysis -

H0 (Null Hypothesis) - This model is not statistically significant

H1 (Alternative Hypothesis) - This model is statistically significant

| ANOVA |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | df | SS | MS | F | Significance F |
| Regression | 2 | 7.74176E+11 | 3.87088E+11 | 11.56429488 | 0.00 |
| Residual | 97 | 3.24685E+12 | 33472681844 |  |  |
| Total | 99 | 4.02103E+12 |  |  |  |

If p(significance) = 0< alpha

=> Reject H0

H1

Here, p < alpha so we reject null hypothesis and accept H1, Therefore we can say model is significant

Interepretation

Of R2 (coefficiant of determination ), Here R2 value is 0.19