AIM:

PROCEDURE:

1. Start MS Excel application in MS Office.
2. Create a datasheet for student marks in MS Excel.
3. Install the Analysis ToolPak if not already installed:
    - Click the Microsoft Office button > Excel Options > Add-Ins > Click Go > Check the Analysis ToolPak box > Click OK.
4. Navigate to the Data tab > Data Analysis > Select Descriptive Statistics > Click OK.
5. In the Input Range, select the data. Choose an Output Range for the results (or leave blank for a new worksheet).
6. Check Summary Statistics and Confidence Level for Mean (default: 95%). Adjust the confidence level if needed.
7. Click OK to display the results in the selected output range.
8. Save the Excel file and close the application.

OUTPUT:

S. No	Reg No	Name	Tamil	English	Maths	Science	Social
1	5011	Ram	70	70	60	80	78
2	5012	Amala	78	67	90	78	78
3	5013	Karthick	94	65	65	90	65
4	5014	Sanjai	78	89	56	55	91
5	5015	Banu	89	89	76	99	99

Column1	
Mean	81.8
Standard Error	4.294182
Median	78
Mode	78
Standard Deviation	9.602083
Sample Variance	92.2
Kurtosis	-1.43513
Skewness	0.205351
Range	24
Minimum	70
Maximum	94
Sum	409
Count	5

RESULT:

AIM:

PROCEDURE:

1. Start MS Excel and create a datasheet for student marks.
2. Install Analysis ToolPak if not already installed:
   - Microsoft Office button > Excel Options > Add-Ins > Go > Check Analysis ToolPak > OK.
3. Navigate to Data tab > Data Analysis > Select z-Test: Two Sample for Means > OK.
4. In Input Range, select data for Variable 1 and Variable 2. Set Known Variance to 0.5 for both.
5. Specify Output Range or leave blank for a new worksheet.
6. Click OK to view results.
7. Save and close the file.

OUTPUT:

S. No	Reg No	Name	Tamil	English	Maths	Science	Social
1	5011	Ram	70	70	60	80	78
2	5012	Amala	78	67	90	78	78
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5	5015	Banu	89	89	76	99	99

z-Test: Two Sample for Means		
	Variable 1	Variable 2
Mean	76	69.4
Known Variance	1.5	1.5
Observations	5	5
Hypothesized Mean I	0	
z	8.520563	
P(Z<=z) one-tail	0	
z Critical one-tail	1.644854	
P(Z<=z) two-tail	0	
z Critical two-tail	1.959964	

RESULT:

AIM:

PROCEDURE:

1. Start MS Excel and create a datasheet for student marks.
2. Install Analysis ToolPak if not already installed:
    a. Microsoft Office button > Excel Options > Add-Ins > Go > Check Analysis ToolPak > OK.
3. Navigate to Data tab > Data Analysis > Select t-Test: Paired Two Sample for Means > OK.
4. Select Input Range for both variables. Set Alpha to 0.05.
5. Specify Output Range and click OK.

OUTPUT:

S. No	Reg No	Name	Tamil	English	Maths	Science	Social
1	5011	Ram	70	70	60	80	78
2	5012	Amala	78	67	90	78	78
3	5013	Karthick	94	65	65	90	65
4	5014	Sanjai	78	89	56	55	91
5	5015	Banu	89	89	76	99	99

t-Test: Paired Two Sample for Means		
	Variable 1	*Variable 2*
Mean	81.8	82.2
Variance	92.2	172.7
Observations	5	5
Pearson Correlation	-0.11253	
Hypothesized Mean I	0	
df	4	
t Stat	-0.05223	
P(T<=t) one-tail	0.480426	
t Critical one-tail	2.131847	
P(T<=t) two-tail	0.960853	
t Critical two-tail	2.776445	

RESULT:

AIM:

PROCEDURE:

1. Start MS Excel and create a datasheet for student marks.
2. Install Analysis ToolPak if not already installed:
    a. Microsoft Office button > Excel Options > Add-Ins > Go > Check Analysis ToolPak > OK.
3. Navigate to the Data tab > Data Analysis > Select ANOVA: Single Factor > OK.
4. Select Input Range and set Alpha to 0.05.
5. Specify Output Range and click OK.

OUTPUT:

Anova: Single Factor

SUMMARY				
Groups	*Count*	*Sum*	*Average*	*Variance*
Column 1	2	172	86	128
Column 2	2	154	77	288
Column 3	2	121	60.5	40.5
Column 4	2	76	38	578
Column 5	2	156	78	338

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	2922.4	4	730.6	2.661566	0.155933	5.192168
Within Groups	1372.5	5	274.5			
Total	4294.9	9				

RESULT: