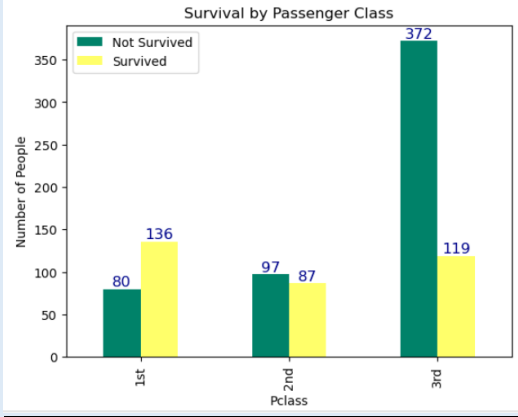
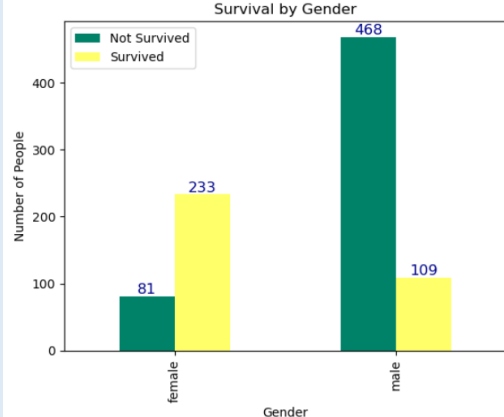
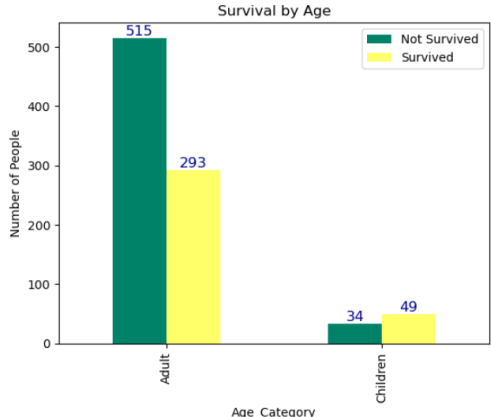


SUMMARY OF TITANIC DATASET

This assignment utilized the Titanic dataset from Kaggle, which comprises 12 columns and 891 rows.

I tested three hypotheses using chi-square tests based on this dataset.

HYPOTHESES #1		HYPOTHESES #2		HYPOTHESES #3																																					
Hypotheses	H0: The class of passenger does not affect the survival rate. H1: The class of passenger affects the survival rate.	H0: The gender of passenger does not affect the survival rate. H1: The gender of passenger affects the survival rate.	If age is younger than 15 "Children", Otherwise called "Adult" H0: The age class does not affect the survival rate. H1: The age class affects the survival rate.																																						
Categorical Tables:	<table><thead><tr><th></th><th>Not Survived</th><th>Survived</th></tr></thead><tbody><tr><td>1st</td><td>80</td><td>136</td></tr><tr><td>2nd</td><td>97</td><td>87</td></tr><tr><td>3rd</td><td>372</td><td>119</td></tr></tbody></table>		Not Survived	Survived	1st	80	136	2nd	97	87	3rd	372	119	<table><thead><tr><th></th><th>Not Survived</th><th>Survived</th></tr></thead><tbody><tr><td>Sex</td><td></td><td></td></tr><tr><td>female</td><td>81</td><td>233</td></tr><tr><td>male</td><td>468</td><td>109</td></tr></tbody></table>		Not Survived	Survived	Sex			female	81	233	male	468	109	<table><thead><tr><th></th><th>Not Survived</th><th>Survived</th></tr></thead><tbody><tr><td>Age_Category</td><td></td><td></td></tr><tr><td>Adult</td><td>515</td><td>293</td></tr><tr><td>Children</td><td>34</td><td>49</td></tr></tbody></table>				Not Survived	Survived	Age_Category			Adult	515	293	Children	34	49
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It appears that there is no statistically significant association between survival chance and gender, pcals, and age.																																									
Chi Square Test	Hyp1_Chi2: 102.89 Hyp1_P-Value: 0.00000 Hyp1_Def: 2	Hyp2_Chi2: 260.72 Hyp2_P-Value: 0.00000 Hyp2_Def: 1	Hyp3_Chi2: 15.56 Hyp3_P-Value: 0.00008 Hyp3_Def: 1																																						
Result	Significant level (5%) > P-Value (0.00000) Reject the null hypothesis The passenger class does affect the survival rate	Significant level (5%) > P-Value (0.00000) Reject the null hypothesis The passenger gender does affect the survival rate	Significant level (5%) > P-Value (0.00008) Reject the null hypothesis The passenger age does affect the survival rate.																																						