User ID: 43499 Tool Used: Gretel

All Categorical Variables:	
Name	
Embarked	
Sex	
Ticket	
Cabin	
Survived	
Independent Continuous Variables:	
Passengerld	
Pclass	
Age	
SibSp	
Parch	
Fare	

User ID: 28293 Tool Used: Gretel

**Execution Start Time:** 2023-08-02 13:16:07 **Execution End Time:** 2023-08-02 13:16:07

### **Kolmogorov-Smirnov Test Results:**

Variable	p-value	KS-Statistic	Inference	Result
Passengerld	1.5682775992087616e-48	0.2684776655443322	Does not match the real data distribution significantly.	Fail
Pclass	6.040481159102964e-12	0.13197575757575758	Does not match the real data distribution significantly.	Fail
Age	3.457973660150079e-39	0.2413117845117845	Does not match the real data distribution significantly.	Fail
SibSp	2.5786292703585823e-05	0.08597934904601572	Does not match the real data distribution significantly.	Fail
Parch	7.984215474120097e-05	0.08154276094276094	Does not match the real data distribution significantly.	Fail
Fare	1.8106059226207038e-157	0.47710864197530867	Does not match the real data distribution significantly.	Fail

User ID: 84566 Tool Used: Gretel

**Execution Start Time:** 2023-08-02 13:16:07 **Execution End Time:** 2023-08-02 13:16:07

#### **T-Test Results:**

Variable	p-value	T-Statistic	Inference	Result
Passengerld	0.0002773089345938805	3.637819205714891	Significantly different means from real data.	Fail
Pclass	1.0331804101507008e-09	6.114126846359151	Significantly different means from real data.	Fail
Age	nan	nan	Significantly different means from real data.	Fail
SibSp	2.131506513712287e-06	-4.745266668286333	Significantly different means from real data.	Fail
Parch	0.011809978805879971	-2.51855653961849	Significantly different means from real data.	Fail
Fare	1.7469815171730086e-12	7.068543946945586	Significantly different means from real data.	Fail

User ID: 71638 Tool Used: Gretel

**Execution Start Time:** 2023-08-02 13:16:07 **Execution End Time:** 2023-08-02 13:16:07

#### **Mann-Whitney U Test Results:**

Variable	p-value	MWU-Statistic	Inference	Result
PassengerId	3.0483860501763937e-06	2444126.0	Significantly different distributions from real data.	Fail
Pclass	5.018352759625736e-09	2477037.5	Significantly different distributions from real data.	Fail
Age	nan	nan	Significantly different distributions from real data.	Fail
SibSp	3.7416323677997957e-06	2040726.5	Significantly different distributions from real data.	Fail
Parch	4.279772617887337e-05	2072229.0	Significantly different distributions from real data.	Fail
Fare	5.065045944198622e-73	3058671.5	Significantly different distributions from real data.	Fail

User ID: 51151 Tool Used: Gretel

**Execution Start Time:** 2023-08-02 13:16:07 **Execution End Time:** 2023-08-02 13:16:07

#### **ANOVA Results:**

Variable	p-value	F-Statistic	Inference	Result
Passengerld	3.0482262645543825e-06	13.233728573468158	Significantly different means from real data.	Fail
Pclass	5.0179995192130826e-09	37.38254709336976	Significantly different means from real data.	Fail
Age	6.782911415772228e-11	8.305689333131532	Significantly different means from real data.	Fail
SibSp	3.7414088465715596e-06	22.517555753149274	Significantly different means from real data.	Fail
Parch	4.2795293916982664e-05	6.3431270432550635	Significantly different means from real data.	Fail
Fare	5.0640476230184647e-73	49.96431352990109	Significantly different means from real data.	Fail

User ID: 13366 Tool Used: Gretel

**Execution Start Time:** 2023-08-02 13:16:07 **Execution End Time:** 2023-08-02 13:16:07

#### **Kruskal-Wallis Test Results:**

Variable	p-value	H-Statistic	Inference	Result
Passengerld	3.0482262645543825e-06	21.785959811144902	Significantly different distributions from real data.	Fail
Pclass	5.0179995192130826e-09	34.18242925243185	Significantly different distributions from real data.	Fail
Age	6.782911415772228e-11	42.58059080090582	Significantly different distributions from real data.	Fail
SibSp	3.7414088465715596e-06	21.392968094764136	Significantly different distributions from real data.	Fail
Parch	4.2795293916982664e-05	16.74320318265976	Significantly different distributions from real data.	Fail
Fare	5.0640476230184647e-73	326.68643198538064	Significantly different distributions from real data.	Fail

User ID: 25540 Tool Used: Gretel

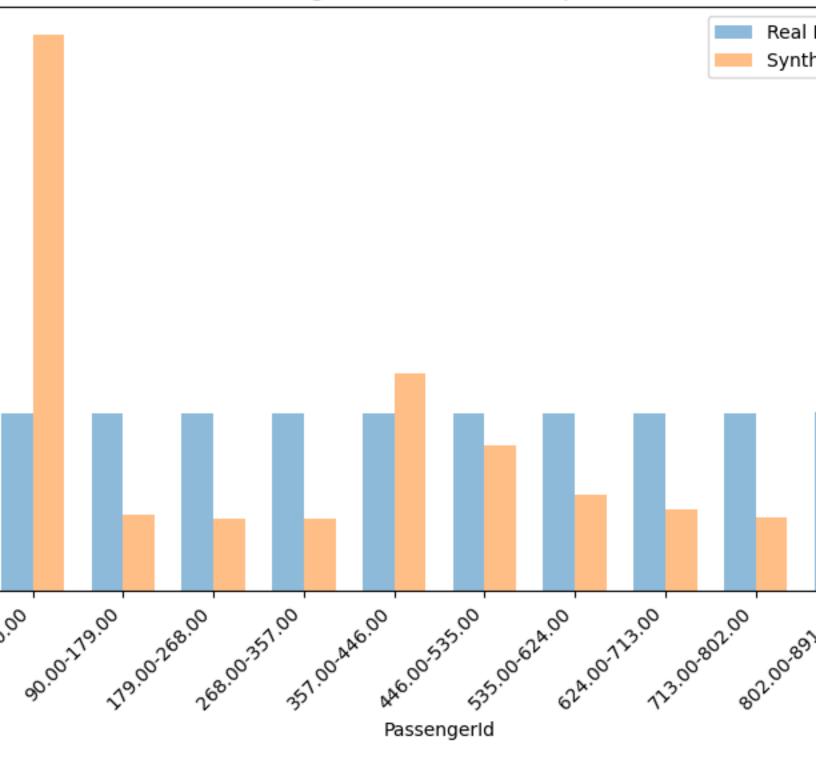
**Execution Start Time:** 2023-08-02 13:16:07 **Execution End Time:** 2023-08-02 13:16:07

### **Chi-Square Test Results:**

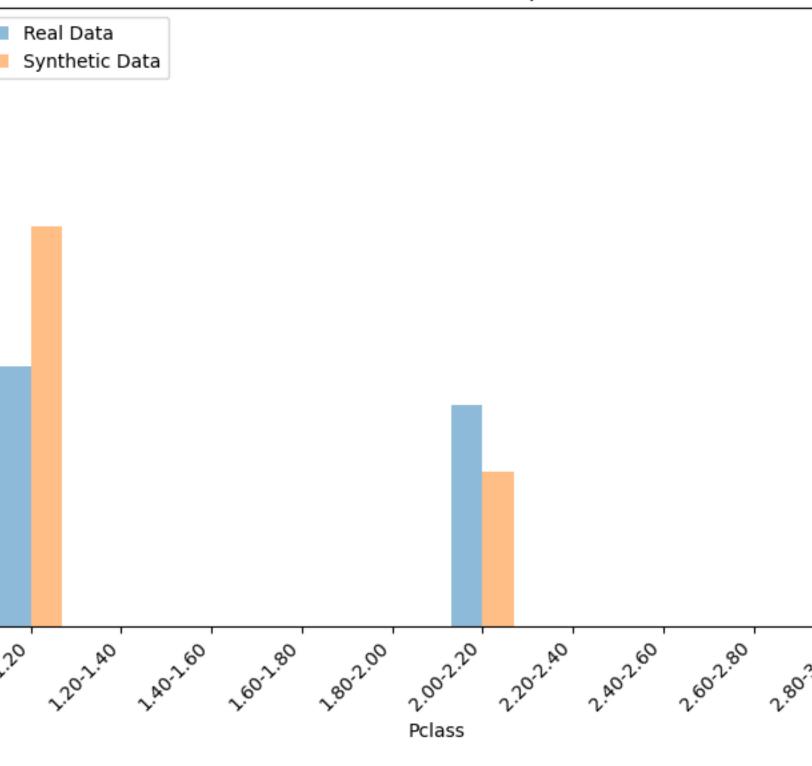
Variable	p-value	Chi2 Statistic	Inference	Result
Name	0.31625643680525556	361746.0000000001	Sig. association between the two variables (similar)	Pass
Embarked	0.17075230342654243	6.406891883591322	Sig. association between the two variables (similar)	Pass
Sex	0.8925041413931792	0.018261808899252534	Sig. association between the two variables (similar)	Pass
Ticket	3.5435223047565303e-07	104255.5319669959	No association between the two variables.	Fail
Cabin	0.16315724393042344	1821.25	Sig. association between the two variables (similar)	Pass
Survived	0.5068543903161106	0.44055564653369533	Sig. association between the two variables (similar)	Pass

Tool Used: Gretel

### Passengerld Distribution Comparison

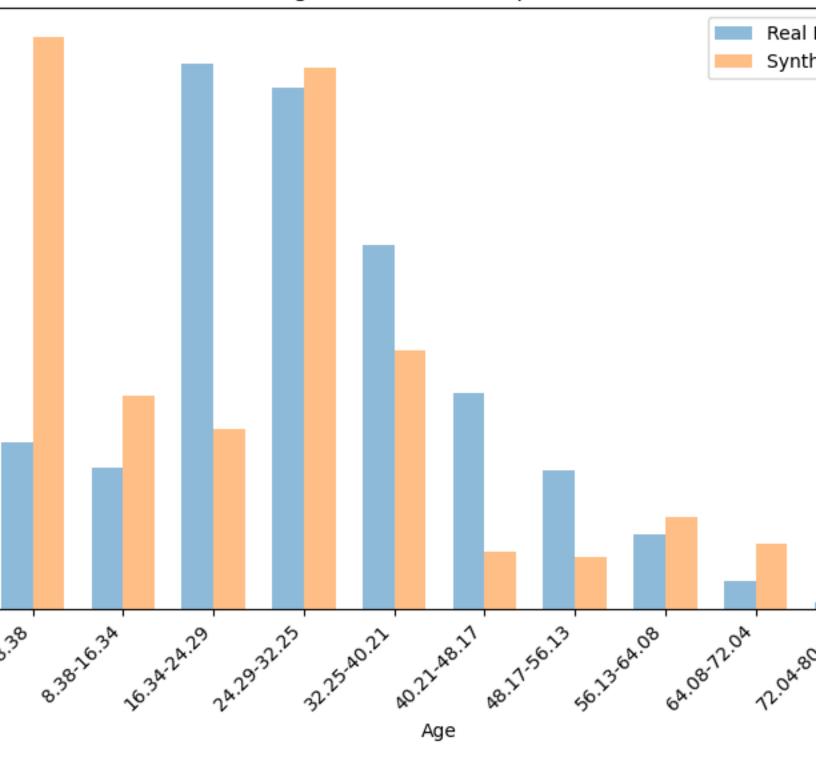


Tool Used: Gretel



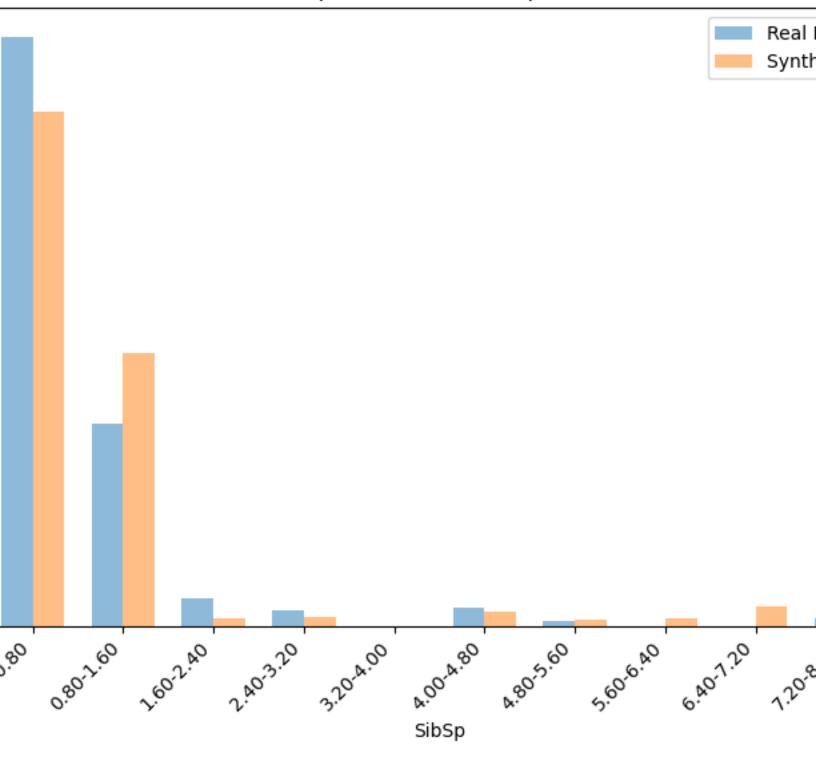
Tool Used: Gretel

# Age Distribution Comparison



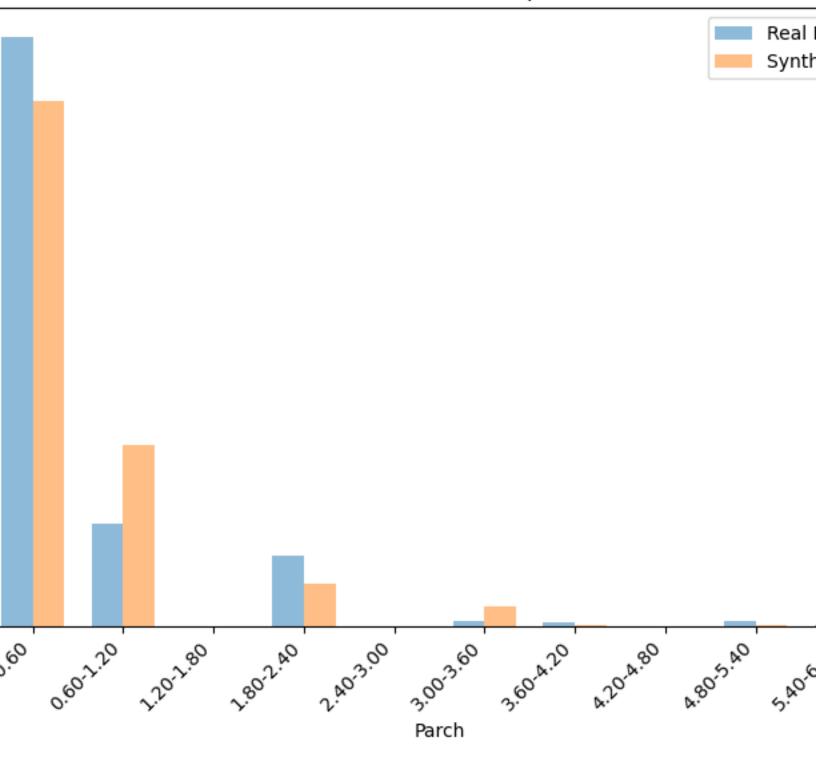
Tool Used: Gretel

# SibSp Distribution Comparison



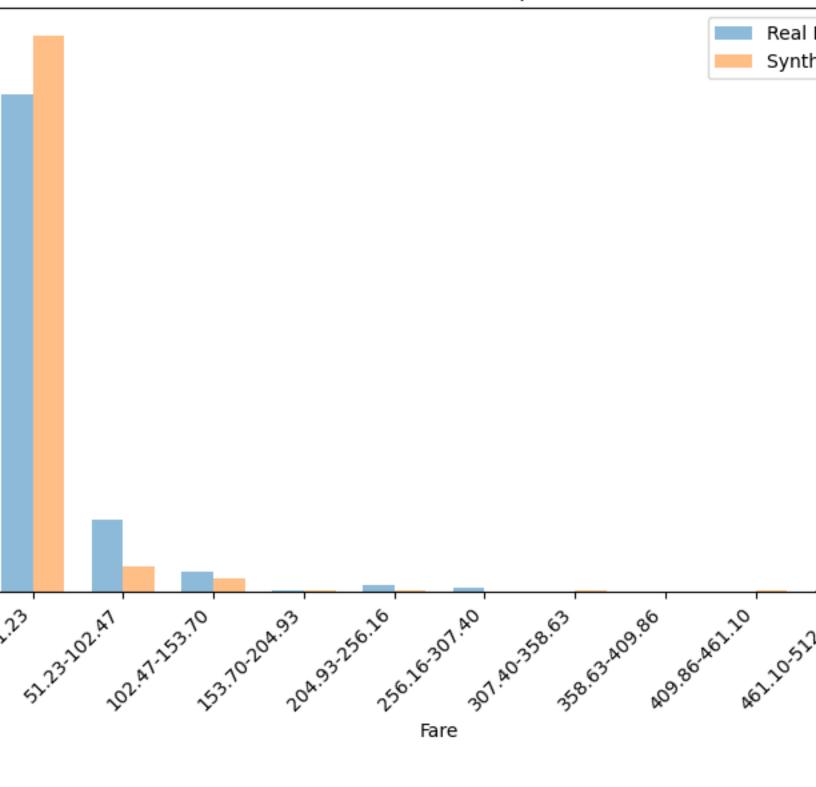
Tool Used: Gretel

# Parch Distribution Comparison



Tool Used: Gretel

### Fare Distribution Comparison

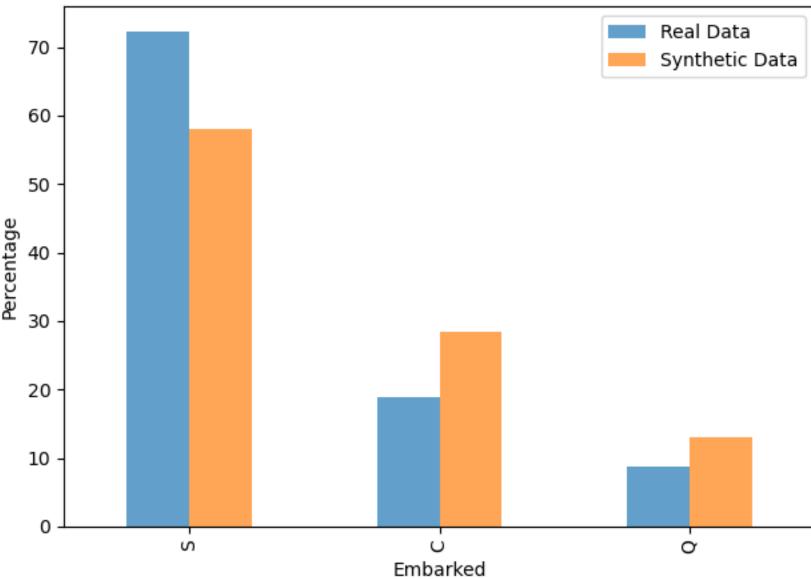


User Name: Aaryan Agarwal

User ID: 16167 Tool Used: Gretel

**Execution Start Time:** 2023-08-02 13:16:07 **Execution End Time:** 2023-08-02 13:16:07

**Embarked Distribution Comparison** 

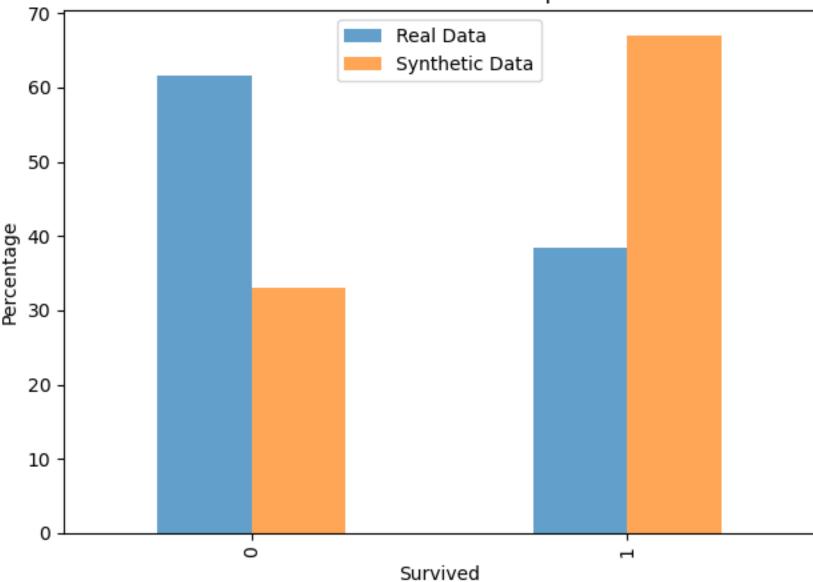


User Name: Aaryan Agarwal

User ID: 62665 Tool Used: Gretel

**Execution Start Time:** 2023-08-02 13:16:07 **Execution End Time:** 2023-08-02 13:16:07

Survived Distribution Comparison

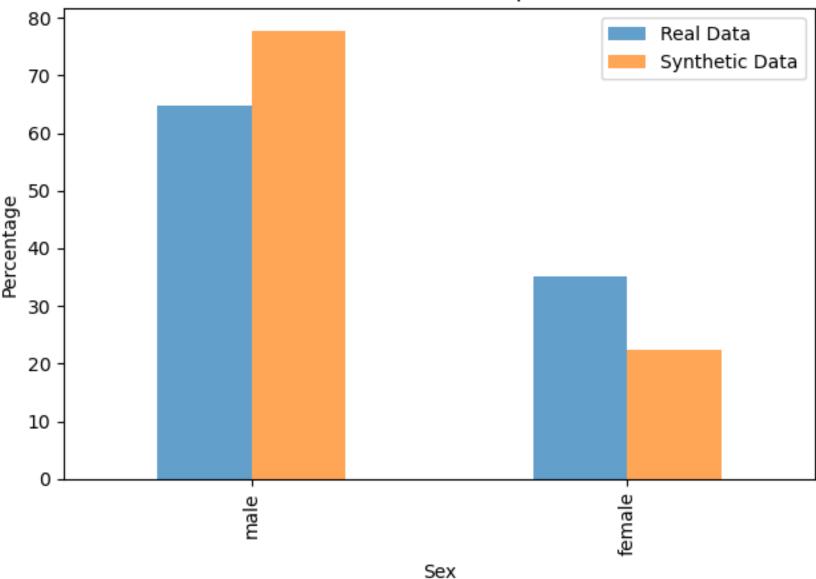


User Name: Aaryan Agarwal

User ID: 30392 Tool Used: Gretel

**Execution Start Time:** 2023-08-02 13:16:07 **Execution End Time:** 2023-08-02 13:16:07

Sex Distribution Comparison



User ID: 28914 Tool Used: Gretel

**Execution Start Time:** 2023-08-02 13:16:07 **Execution End Time:** 2023-08-02 13:16:07

PCA: Real vs. Synthetic Data

PCA: Real vs. Synthetic Data

