

```
In [4]: import pandas as pd

dataset = pd.read_csv('dataset.csv')

print("Original dataset:")
print(dataset.to_string(index=False))
```

Original dataset:

Col1	Col2	Col3	Col4
1	A	1	D
2	B	2	D
3	C	3	D
4	D	4	D
4	D	4	D
5	E	5	D
6	F	6	D
7	G	7	D
7	G	7	D
8	H	8	D
9	I	9	D
10	J	10	D
10	J	10	D
10	J	10	D
11	K	11	D
12	L	12	D
13	M	13	D
13	M	13	D
14	N	14	D
15	O	15	D
16	P	16	D
17	Q	17	D
18	R	18	D
19	S	19	D
20	T	20	D
20	T	20	D
20	T	20	D
21	U	21	D
22	V	22	D
23	W	23	D

```
In [5]: #Delete rows that contain duplicate data
dataset_duplicates_removed = dataset.drop_duplicates()
print("\nDataset with duplicate rows removed:")
print(dataset_duplicates_removed.to_string(index=False))
```

Dataset with duplicate rows removed:

Col1	Col2	Col3	Col4
1	A	1	D
2	B	2	D
3	C	3	D
4	D	4	D
5	E	5	D
6	F	6	D
7	G	7	D
8	H	8	D
9	I	9	D
10	J	10	D
11	K	11	D
12	L	12	D
13	M	13	D
14	N	14	D
15	O	15	D
16	P	16	D
17	Q	17	D
18	R	18	D
19	S	19	D
20	T	20	D
21	U	21	D
22	V	22	D
23	W	23	D

```
In [6]: #Delete columns that contain a single value
dataset_columns_removed = dataset_duplicates_removed.loc[:, dataset_duplicates_removed.nunique() > 1]
print("\nDataset with columns containing a single value removed:")
print(dataset_columns_removed.to_string(index=False))
```

Dataset with columns containing a single value removed:

Col1	Col2	Col3
1	A	1
2	B	2
3	C	3
4	D	4
5	E	5
6	F	6
7	G	7
8	H	8
9	I	9
10	J	10
11	K	11
12	L	12
13	M	13
14	N	14
15	O	15
16	P	16
17	Q	17
18	R	18
19	S	19
20	T	20
21	U	21
22	V	22
23	W	23