```
import pandas as pd
import seaborn as sns


dt = pd.read_csv('/content/details.csv')

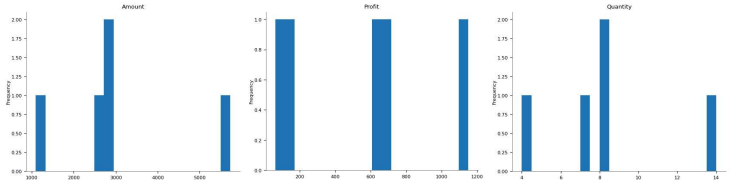

dt.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1500 entries, 0 to 1499
Data columns (total 7 columns):
 #   Column        Non-Null Count  Dtype 
---  ------        --------------  ----- 
 0   Order ID      1500 non-null   object
 1   Amount        1500 non-null   int64 
 2   Profit        1500 non-null   int64 
 3   Quantity      1500 non-null   int64 
 4   Category      1500 non-null   object
 5   Sub-Category  1500 non-null   object
 6   PaymentMode   1500 non-null   object
dtypes: int64(3), object(4)
memory usage: 82.2+ KB
```

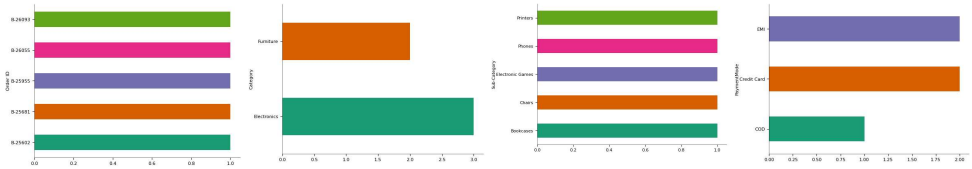
```
dt.head()
```

	Order ID	Amount	Profit	Quantity	Category	Sub-Category	PaymentMode
0	B-25681	1096	658	7	Electronics	Electronic Games	COD
1	B-26055	5729	64	14	Furniture	Chairs	EMI
2	B-25955	2927	146	8	Furniture	Bookcases	EMI
3	B-26093	2847	712	8	Electronics	Printers	Credit Card
4	B-25602	2617	1151	4	Electronics	Phones	Credit Card

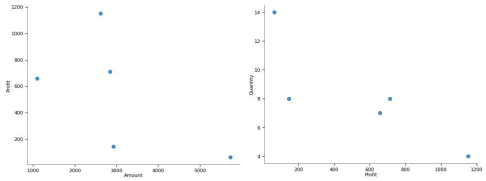
Distributions



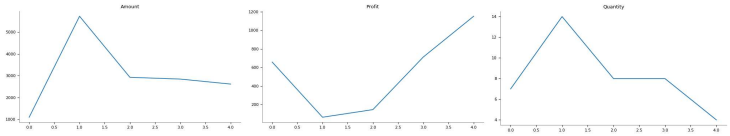
Categorical distributions



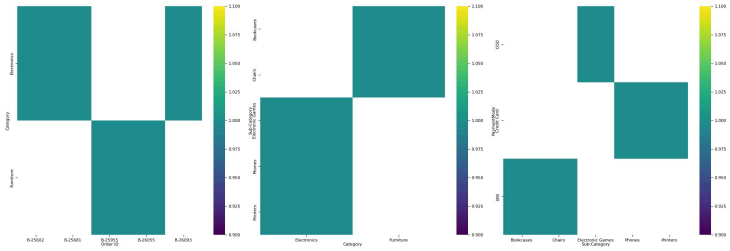
2-d distributions



Values



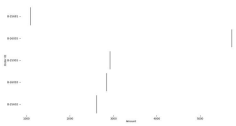
2-d categorical distributions



Faceted distributions

```
<string>:5: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `y` variable to `hue` and set `legend
```



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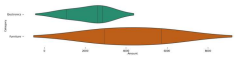

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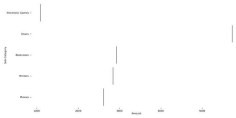
```



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<string>:5: FutureWarning:

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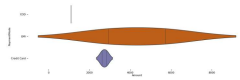
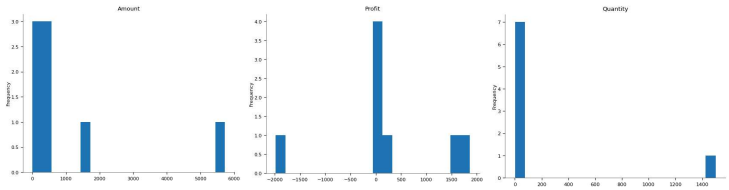
```



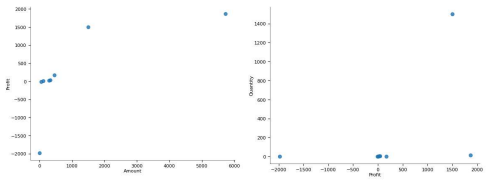
```
dt.describe()
```

	Amount	Profit	Quantity
count	1500.000000	1500.00000	1500.000000
mean	291.847333	24.64200	3.743333
std	461.924620	168.55881	2.184942
min	4.000000	-1981.00000	1.000000
25%	47.750000	-12.00000	2.000000
50%	122.000000	8.00000	3.000000
75%	326.250000	38.00000	5.000000
max	5729.000000	1864.00000	14.000000

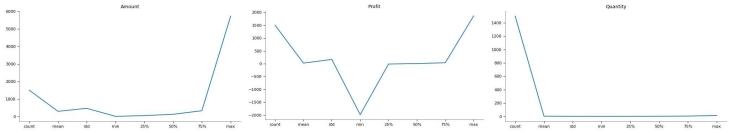
Distributions



2-d distributions



Values




```
dt.columns
```

```
Index(['Order ID', 'Amount', 'Profit', 'Quantity', 'Category', 'Sub-Category',
       'PaymentMode'],
      dtype='object')
```

```
dt.dtypes
```

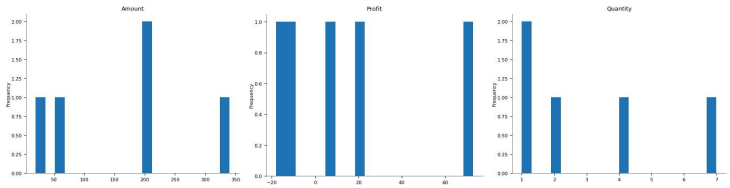
	0
Order ID	object
Amount	int64
Profit	int64
Quantity	int64
Category	object
Sub-Category	object
PaymentMode	object

dtype: object

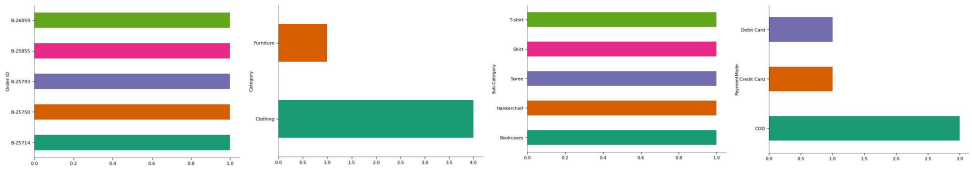
```
dt.sample(n=5)
```

	Order ID	Amount	Profit	Quantity	Category	Sub-Category	PaymentMode
1372	B-26059	20	6	1	Clothing	T-shirt	COD
445	B-25793	60	-12	4	Clothing	Hankerchief	Debit Card
455	B-25750	199	-18	2	Clothing	Saree	COD
945	B-25855	197	73	1	Furniture	Bookcases	COD
393	B-25714	340	20	7	Clothing	Shirt	Credit Card

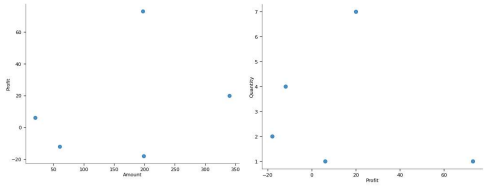
Distributions



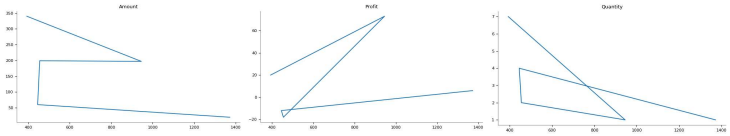
Categorical distributions



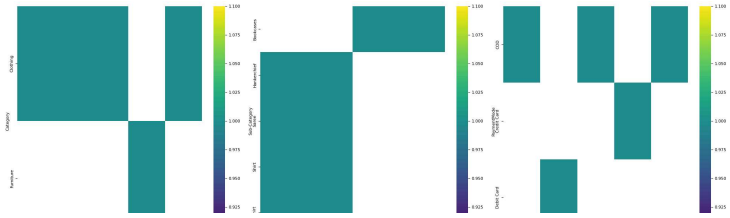
2-d distributions



Values



2-d categorical distributions

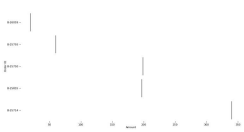


```
dt.groupby('Category').head(3)
```

Faceted distributions

```
<string>:5: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `y` variable to `hue` and set `legend
```



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<string>:5: FutureWarning:

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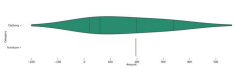

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<string>:5: FutureWarning:

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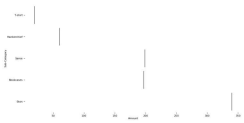
```

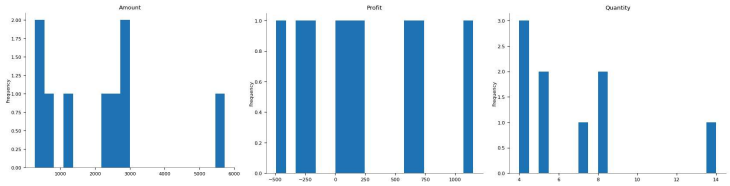


```
<string>:5: FutureWarning:
```

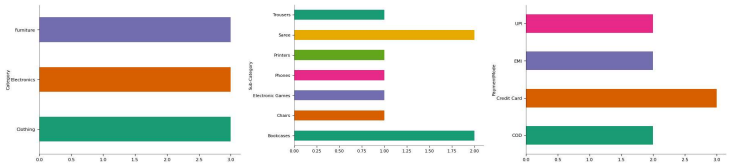
```
Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `y` variable to `hue` and set `legend
```

	Order ID	Amount	Profit	Quantity	Category	Sub-Category	PaymentMode
0	B-25681	1096	658	7	Electronics	Electronic Games	COD
1	B-26055	5729	64	14	Furniture	Chairs	EMI
2	B-25955	2927	146	8	Furniture	Bookcases	EMI
3	B-26093	2847	712	8	Electronics	Printers	Credit Card
4	B-25602	2617	1151	4	Electronics	Phones	Credit Card
5	B-25881	2244	247	4	Clothing	Trousers	Credit Card
6	B-25696	275	-275	4	Clothing	Saree	COD
7	B-25687	387	-213	5	Clothing	Saree	UPI
13	B-25756	729	-492	5	Furniture	Bookcases	UPI

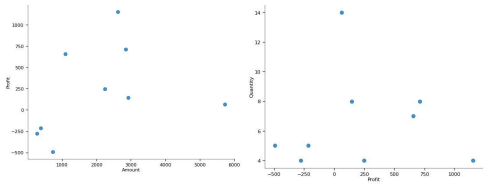
Distributions



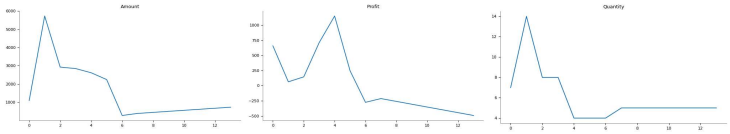
Categorical distributions



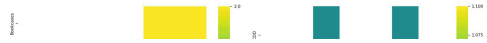
2-d distributions



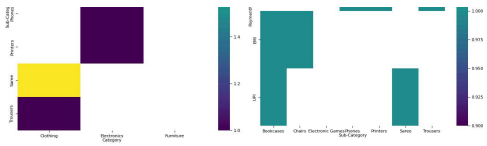
Values



2-d categorical distributions



```
dt.groupby('Sub-Category').head(2)
```



Faceted distributions

```
<string>:5: FutureWarning:

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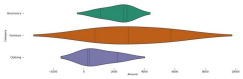
```



```
<string>:5: FutureWarning:

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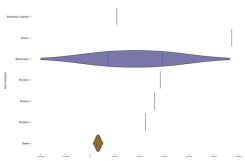
```



```
<string>:5: FutureWarning:
```

```
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```

	Order ID	Amount	Profit	Quantity	Category	Sub-Category	PaymentMode
0	B-25681	1096	658	7	Electronics	Electronic Games	COD
1	B-26055	5729	64	14	Furniture	Chairs	EMI
2	B-25955	2927	146	8	Furniture	Bookcases	EMI
3	B-26093	2847	712	8	Electronics	Printers	Credit Card
4	B-25602	2617	1151	4	Electronics	Phones	Credit Card
5	B-25881	2244	247	4	Clothing	Trousers	Credit Card
6	B-25696	275	-275	4	Clothing	Saree	COD
7	B-25687	387	-213	5	Clothing	Saree	UPI
8	B-25643	50	-44	2	Clothing	Hankerchief	UPI
9	B-25851	135	-54	5	Clothing	Kurti	COD
10	B-25703	231	-190	9	Clothing	Hankerchief	COD
11	B-25887	2125	-234	6	Electronics	Printers	EMI
12	B-25923	3873	-891	6	Electronics	Phones	Credit Card
13	B-25756	729	-492	5	Furniture	Bookcases	UPI
17	B-26095	6	1	1	Clothing	Kurti	UPI
18	B-25853	2093	721	5	Furniture	Chairs	Credit Card
19	B-25735	7	-1	2	Clothing	Skirt	UPI
20	B-25910	1622	-624	5	Furniture	Tables	Credit Card
24	B-26001	8	2	2	Clothing	Skirt	UPI
28	B-25686	1829	-56	6	Furniture	Tables	Credit Card
31	B-25816	391	113	8	Clothing	Stole	COD
36	B-25710	10	-1	1	Clothing	Leggings	UPI
39	B-25723	12	-7	2	Clothing	Leggings	UPI
40	B-25755	1709	564	3	Clothing	Trousers	Credit Card
41	B-25788	12	3	1	Clothing	Stole	UPI
46	B-25943	1547	340	6	Electronics	Accessories	EMI
54	B-25801	15	-2	1	Clothing	T-shirt	Debit Card
63	B-25762	1316	527	7	Electronics	Electronic Games	Credit Card
70	B-26006	1301	573	5	Electronics	Accessories	Credit Card
107	B-25986	749	-307	7	Furniture	Furnishings	COD
120	B-25750	19	-1	1	Clothing	Shirt	Debit Card
233	B-25678	27	25	2	Clothing	Shirt	Debit Card

```
dt.groupby('PaymentMode').head(1)
```

	Order ID	Amount	Profit	Quantity	Category	Sub-Category	PaymentMode
0	B-25681	1096	658	7	Electronics	Electronic Games	COD
1	B-26055	5729	64	14	Furniture	Chairs	EMI
3	B-26093	2847	712	8	Electronics	Printers	Credit Card
7	B-25687	387	-213	5	Clothing	Saree	UPI
54	B-25801	15	-2	1	Clothing	T-shirt	Debit Card

```
upi_group = dt[dt['PaymentMode'] == 'UPI']
```

```
print(upi_group)
```

```
   Order ID  Amount  Profit  Quantity     Category      Sub-Category  \
7   B-25687     387    -213         5     Clothing             Saree
8   B-25643      50     -44         2     Clothing       Hankerchief
13  B-25756     729    -492         5    Furniture         Bookcases
```

```
15    B-25655       6      -3         1     Clothing       Hankerchief
17    B-26095       6       1         1     Clothing            Kurti
...       ...     ...     ...       ...          ...               ...
1466  B-26070      14       7         2     Clothing       Hankerchief
1471  B-25950      13       4         1     Clothing          Leggings
1480  B-25862    2061     701         5    Furniture         Bookcases
1482  B-25823    2103     322         8  Electronics  Electronic Games
1489  B-25969    2452     191         7    Furniture         Bookcases

     PaymentMode
7            UPI
8            UPI
13           UPI
15           UPI
17           UPI
...          ...
1466         UPI
1471         UPI
1480         UPI
1482         UPI
1489         UPI

[331 rows x 7 columns]
```

```
emi_group = dt[dt['PaymentMode'] == 'EMI']


print(emi_group)
```

```
     Order ID  Amount  Profit  Quantity     Category      Sub-Category  \
1     B-26055    5729      64        14    Furniture            Chairs
2     B-25955    2927     146         8    Furniture         Bookcases
11    B-25887    2125    -234         6  Electronics          Printers
30    B-26048    1461     202         5    Furniture            Tables
37    B-25797    1630     802         5    Furniture            Tables
```