In [1]:
```
!pip install ppscore
```

```
Requirement already satisfied: ppscore in c:\users\hp\anaconda3\lib\site-packages (1.2.0)
Requirement already satisfied: pandas<2.0.0,>=1.0.0 in c:\users\hp\anaconda3\lib\site-packages (from ppscore) (1.2.4)
Requirement already satisfied: scikit-learn<1.0.0,>=0.20.2 in c:\users\hp\anaconda3\lib\site-packages (from ppscore) (0.24.1)
Requirement already satisfied: numpy>=1.16.5 in c:\users\hp\anaconda3\lib\site-packages (from pandas<2.0.0,>=1.0.0->ppscore) (1.21.3)
Requirement already satisfied: pytz>=2017.3 in c:\users\hp\anaconda3\lib\site-packages (from pandas<2.0.0,>=1.0.0->ppscore) (2021.1)
Requirement already satisfied: python-dateutil>=2.7.3 in c:\users\hp\anaconda3\lib\site-packages (from pandas<2.0.0,>=1.0.0->ppscore) (2.8.1)
Requirement already satisfied: six>=1.5 in c:\users\hp\anaconda3\lib\site-packages (from python-dateutil>=2.7.3->pandas<2.0.0,>=1.0.0->ppscore) (1.15.0)
Requirement already satisfied: joblib>=0.11 in c:\users\hp\anaconda3\lib\site-packages (from scikit-learn<1.0.0,>=0.20.2->ppscore) (1.0.1)
Requirement already satisfied: scipy>=0.19.1 in c:\users\hp\anaconda3\lib\site-packages (from scikit-learn<1.0.0,>=0.20.2->ppscore) (1.7.3)
Requirement already satisfied: threadpoolctl>=2.0.0 in c:\users\hp\anaconda3\lib\site-packages (from scikit-learn<1.0.0,>=0.20.2->ppscore) (2.1.0)
```

In [2]:
```
import ppscore as pp
import pandas as pd
import seaborn as sns
from sklearn import datasets
```

In [3]:
```
df=datasets.load_iris()
data=pd.DataFrame(df.data,columns=df.feature_names)
target=pd.DataFrame(df.target,columns=["species"])
target
data=pd.concat([data,target],axis=1)
data
```

Out[3]:

	sepal length (cm)	sepal width (cm)	petal length (cm)	petal width (cm)	species
0	5.1	3.5	1.4	0.2	0
1	4.9	3.0	1.4	0.2	0
2	4.7	3.2	1.3	0.2	0
3	4.6	3.1	1.5	0.2	0
4	5.0	3.6	1.4	0.2	0
...	...	...	...	...	...
145	6.7	3.0	5.2	2.3	2
146	6.3	2.5	5.0	1.9	2
147	6.5	3.0	5.2	2.0	2
148	6.2	3.4	5.4	2.3	2
149	5.9	3.0	5.1	1.8	2

150 rows × 5 columns

In [4]:
```
pp.score(data,x='sepal length (cm)',y='sepal width (cm)')
#PPS SCORE INDICATE RELATION BETWEEN TWO COLUMNS
#Two features thats can't be define by classification and all we will go for pps score
```

Out[4]:
```
{'x': 'sepal length (cm)',
 'y': 'sepal width (cm)',
 'ppscore': 0,
 'case': 'regression',
 'is_valid_score': True,
 'metric': 'mean absolute error',
 'baseline_score': 0.3306666666666666,
 'model_score': 0.3647043707241076,
 'model': DecisionTreeRegressor()}
```

In [5]:
```
#Caluclate ppe metrics
pp.matrix(data)
```

Out[5]:

	x	y	ppscore	case	is_valid_score	metric	baseline_score	model_score	model
0	sepal length (cm)	sepal length (cm)	1.000000	predict_itself	True	None	0.000000	1.000000	None
1	sepal length (cm)	sepal width (cm)	0.000000	regression	True	mean absolute error	0.330667	0.364704	DecisionTreeRegressor()
2	sepal length (cm)	petal length (cm)	0.550423	regression	True	mean absolute error	1.488667	0.669271	DecisionTreeRegressor()
3	sepal length (cm)	petal width (cm)	0.431739	regression	True	mean absolute error	0.644667	0.366339	DecisionTreeRegressor()
4	sepal length (cm)	species	0.346619	regression	True	mean absolute error	0.666667	0.435587	DecisionTreeRegressor()
5	sepal width (cm)	sepal length (cm)	0.006966	regression	True	mean absolute error	0.684667	0.679897	DecisionTreeRegressor()
6	sepal width (cm)	sepal width (cm)	1.000000	predict_itself	True	None	0.000000	1.000000	None
7	sepal width (cm)	petal length (cm)	0.172375	regression	True	mean absolute error	1.488667	1.232058	DecisionTreeRegressor()
8	sepal width (cm)	petal width (cm)	0.132858	regression	True	mean absolute error	0.644667	0.559017	DecisionTreeRegressor()
9	sepal width (cm)	species	0.074871	regression	True	mean absolute error	0.666667	0.616753	DecisionTreeRegressor()
10	petal length (cm)	sepal length (cm)	0.525617	regression	True	mean absolute error	0.684667	0.324794	DecisionTreeRegressor()
11	petal length (cm)	sepal width (cm)	0.052136	regression	True	mean absolute error	0.330667	0.313427	DecisionTreeRegressor()
12	petal length (cm)	petal length (cm)	1.000000	predict_itself	True	None	0.000000	1.000000	None
13	petal length (cm)	petal width (cm)	0.744945	regression	True	mean absolute error	0.644667	0.164425	DecisionTreeRegressor()
14	petal length (cm)	species	0.881789	regression	True	mean absolute error	0.666667	0.078808	DecisionTreeRegressor()
15	petal width (cm)	sepal length (cm)	0.383911	regression	True	mean absolute error	0.684667	0.421816	DecisionTreeRegressor()
16	petal width (cm)	sepal width (cm)	0.254616	regression	True	mean absolute error	0.330667	0.246474	DecisionTreeRegressor()
17	petal width (cm)	petal length (cm)	0.798274	regression	True	mean absolute error	1.488667	0.300302	DecisionTreeRegressor()
18	petal width (cm)	petal width (cm)	1.000000	predict_itself	True	None	0.000000	1.000000	None
19	petal width (cm)	species	0.880127	regression	True	mean absolute error	0.666667	0.079915	DecisionTreeRegressor()
20	species	sepal length (cm)	0.409634	regression	True	mean absolute error	0.684667	0.404204	DecisionTreeRegressor()
21	species	sepal width (cm)	0.194307	regression	True	mean absolute error	0.330667	0.266416	DecisionTreeRegressor()
22	species	petal length (cm)	0.785393	regression	True	mean absolute error	1.488667	0.319479	DecisionTreeRegressor()
23	species	petal width (cm)	0.755749	regression	True	mean absolute error	0.644667	0.157460	DecisionTreeRegressor()
24	species	species	1.000000	predict_itself	True	None	0.000000	1.000000	None