

```
!pip install pycaret
```


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Requirement already satisfied: wcwidth in /usr/local/lib/python3.7/dist-packages (
Requirement already satisfied: charset-normalizer~=2.0.0 in /usr/local/lib/python3
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Requirement already satisfied: llvmlite<0.35,>=0.34.0.dev0 in /usr/local/lib/pythc
```

Requirement already satisfied: pandas>=0.4.0 in /usr/local/lib/python3.7/dist-packages

```
from pycaret.datasets import get_data
data=get_data('diabetes')
```

	Pregnancies	Glucose	BloodPressure	SkinThickness	Insulin	BMI	DiabetesPedi
0	6	148	72	35	0	33.6	
1	1	85	66	29	0	26.6	
2	8	183	64	0	0	23.3	
3	1	89	66	23	94	28.1	
4	0	137	40	35	168	43.1	

```
from pycaret.anomaly import *
ex1=setup(data)
```

	Description	Value	
0	session_id	5711	
1	Original Data	(768, 9)	
2	Missing Values	False	
3	Numeric Features	7	
4	Categorical Features	2	
5	Ordinal Features	False	
6	High Cardinality Features	False	
7	High Cardinality Method	None	
8	Transformed Data	(768, 26)	
9	CPU Jobs	-1	
10	Use GPU	False	
11	Log Experiment	False	
12	Experiment Name	anomaly-default-name	
13	USI	0eaa	
14	Imputation Type	simple	
15	Iterative Imputation Iteration	None	
16	Numeric Imputer	mean	
17	Iterative Imputation Numeric Model	None	
18	Categorical Imputer	mode	
19	Iterative Imputation Categorical Model	None	
20	Unknown Categoricals Handling	least_frequent	
21	Normalize	False	
22	Normalize Method	None	
23	Transformation	False	
24	Transformation Method	None	
25	PCA	False	
26	PCA Method	None	
27	PCA Components	None	
28	Ignore Low Variance	False	
 knn=create_model('knn')			
30	Rare Level Threshold	None	
print(knn)			

```
KNN(algorithm='auto', contamination=0.05, leaf_size=30, method='largest',  
    metric='minkowski', metric_params=None, n_jobs=-1, n_neighbors=5, p=2,  
    radius=1.0)
```

34

Remove Multicollinearity

False

```
iforest = create_model('iforest')
```

```
print(iforest)
```

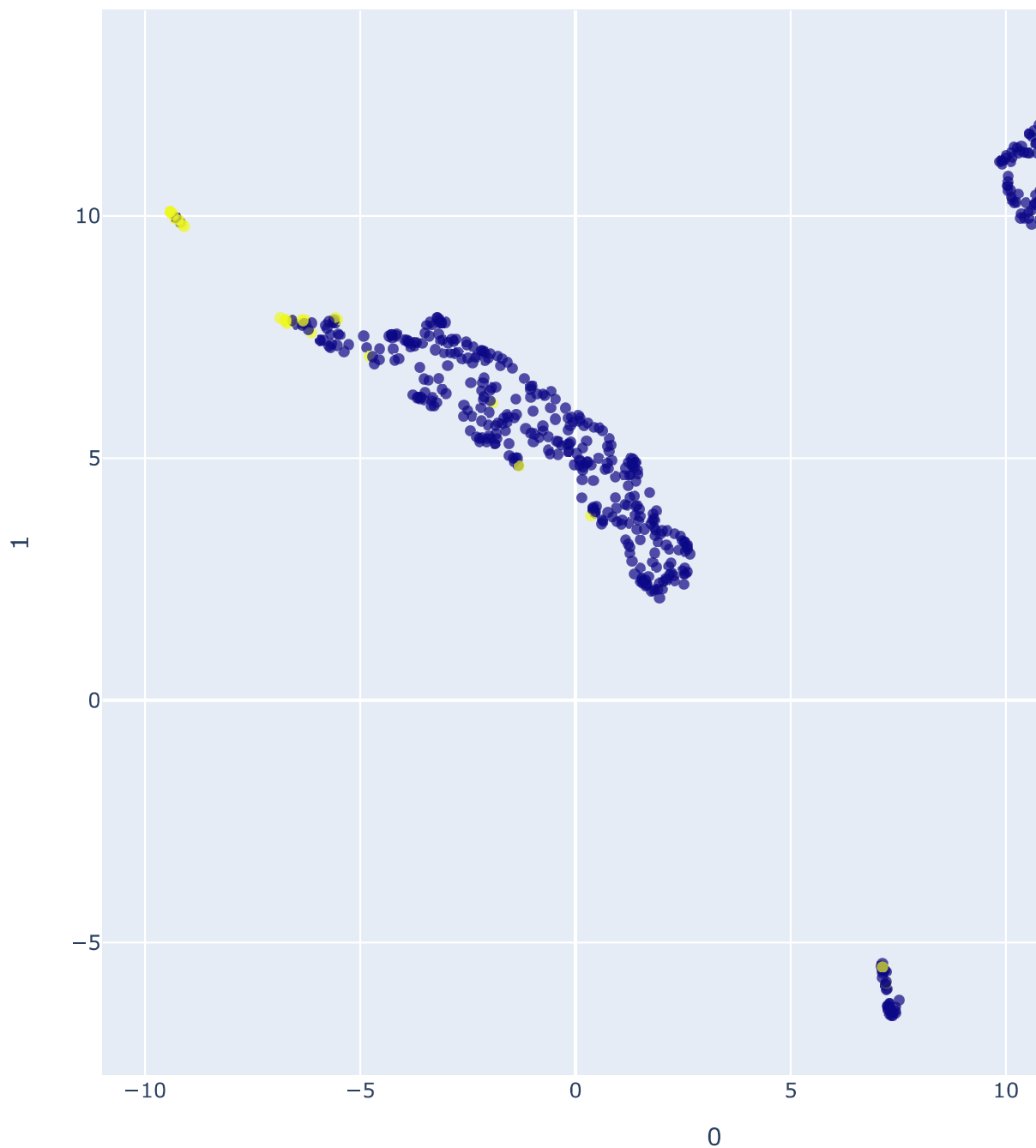
```
IForest(behaviour='new', bootstrap=False, contamination=0.05,  
        max_features=1.0, max_samples='auto', n_estimators=100, n_jobs=-1,  
        random_state=5711, verbose=0)
```

```
plot_model(knn)
```

3d TSNE Plot for Outliers

```
plot_model(knn,plot='umap')
```

uMAP Plot for Outliers



```
knn_results=assign_model(knn)  
knn_results.head()
```

1 entry (filtered from 5 total entries)

Filter

?

index:

0

 to

Pregnancies:

to

Glucose:

to

BloodPressure:

to

SkinThickness:

to

Insulin:

to

BMI:

to

DiabetesPedigreeFunction:

to

Age:

to

Outcome:

to

Anomaly:

.

Anomaly_Score:

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✓ 0s

completed at 11:01 PM

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