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Batch: 2

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ML_INLAB_1

```
[4] import pandas as pd
import numpy as np
from scipy import stats
```

```
[2] df=pd.read_csv('diabetes.csv')
```

df

	Pregnancies	Glucose	BloodPressure	SkinThickness	Insulin	BMI	DiabetesPedigreeFunction	Age	Outcome
0	6	148	72	35	0	33.6	0.627	50	1
1	1	85	66	29	0	26.6	0.351	31	0
2	8	183	64	0	0	23.3	0.672	32	1
3	1	89	66	23	94	28.1	0.167	21	0
4	0	137	40	35	168	43.1	2.288	33	1
...
763	10	101	76	48	180	32.9	0.171	63	0
764	9	122	70	27	0	36.9	0.342	80	1

```
col1=df['Glucose']
print ("\nZ-score for arr1 : \n", stats.zscore(col1))
```

```
Z-score for arr1 :
0      0.848324
1     -1.123396
2      1.943724
3     -0.998208
4      0.504055
...
763    -0.622642
764     0.034598
765     0.003301
766     0.159787
767    -0.873019
Name: Glucose, Length: 768, dtype: float64
```

```
[14] df['binned']=pd.cut(x=df['Glucose'], bins=[0,80,100,126,199], label
```

```
df2 = df.loc[:, ["Glucose","binned"]]  
df2.head(10)
```

	Glucose	binned
0	148	high
1	85	normal
2	183	high
3	89	normal
4	137	high
5	116	impaired glucose
6	78	very low
7	115	impaired glucose

