```python
import pandas as pd
import numpy as np


np.random.seed(0)
data = np.random.randn(10, 4)
df = pd.DataFrame(data, columns=['A', 'B', 'C', 'D'])


df.loc[2, 'A'] = np.nan
df.loc[5, 'C'] = np.nan
df.loc[8, 'D'] = np.nan


def highlight_nan(val):
    if pd.isna(val):
        return 'background-color: yellow'
    else:
        return ''


styled_df = df.style.applymap(highlight_nan)


styled_df
```

	A	B	C	D
0	1.764052	0.400157	0.978738	2.240893
1	1.867558	-0.977278	0.950088	-0.151357
2	nan	0.410599	0.144044	1.454274
3	0.761038	0.121675	0.443863	0.333674
4	1.494079	-0.205158	0.313068	-0.854096
5	-2.552990	0.653619	nan	-0.742165
6	2.269755	-1.454366	0.045759	-0.187184
7	1.532779	1.469359	0.154947	0.378163
8	-0.887786	-1.980796	-0.347912	nan
9	1.230291	1.202380	-0.387327	-0.302303