In [1]:
```
## How to drop out highly correlated features in Python
def Snippet_127():
    print()
    print(format('How to drop out highly correlated features in Python','**82'))
    import warnings
    warnings.filterwarnings("ignore")
    # load libraries
    import pandas as pd
    import numpy as np
    from sklearn.datasets import load_iris

    iris = load_iris()
    # Create features and target
    X = iris.data; print(); print(X)
    y = iris.target; print(); print(y)
    # Convert feature matrix into DataFrame
    df = pd.DataFrame(X)
    # View the data frame
    print(); print(df)
    # Create correlation matrix
    corr_matrix = df.corr().abs()
    print(); print(corr_matrix)
    # Select upper triangle of correlation matrix
    upper = corr_matrix.where(np.triu(np.ones(corr_matrix.shape),
                                      k=1).astype(np.bool))

    print(); print(upper)
    # Find index of feature columns with correlation greater than 0.95
    to_drop = [column for column in upper.columns if any(upper[column] > 0.95)]
    print(); print(to_drop)
    # Drop Marked Features
    df1 = df.drop(df.columns[to_drop], axis=1)
    print(); print(df1)
Snippet_127()
```

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**************How to drop out highly correlated features in Python***************

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[150 rows x 4 columns]

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11   4.8  3.4  1.6
12   4.8  3.0  1.4
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18   5.7  3.8  1.7
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21   5.1  3.7  1.5
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26   5.0  3.4  1.6
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28   5.2  3.4  1.4
29   4.7  3.2  1.6
..   ...  ...  ...
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[150 rows x 3 columns]
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In [ ]:
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