Correlation Coefficients for Numerical Features:

cadastral\_income 0.000151

surface\_land\_sqm -0.002183

total\_area\_sqm 0.001492

construction\_year -0.004326

latitude -0.000586

longitude 0.001667

garden\_sqm -0.000102

primary\_energy\_consumption\_sqm -0.003754

nbr\_frontages 0.007487

nbr\_bedrooms 0.008392

terrace\_sqm -0.002451

dtype: float64

c:\Users\afshi\AppData\Local\Programs\Python\Python312\Lib\site-packages\numpy\lib\function\_base.py:2897: RuntimeWarning: invalid value encountered in divide

c /= stddev[:, None]

c:\Users\afshi\AppData\Local\Programs\Python\Python312\Lib\site-packages\numpy\lib\function\_base.py:2898: RuntimeWarning: invalid value encountered in divide

c /= stddev[None, :]

Correlation Coefficients for Encoded Categorical Features:

property\_type\_APARTMENT -0.004276

property\_type\_HOUSE 0.004276

subproperty\_type\_APARTMENT -0.002038

subproperty\_type\_APARTMENT\_BLOCK 0.001837

subproperty\_type\_BUNGALOW 0.003525

...

equipped\_kitchen\_SEMI\_EQUIPPED 0.003553

equipped\_kitchen\_USA\_HYPER\_EQUIPPED 0.004211

equipped\_kitchen\_USA\_INSTALLED 0.001279

equipped\_kitchen\_USA\_SEMI\_EQUIPPED 0.006744

equipped\_kitchen\_USA\_UNINSTALLED -0.004711

Length: 1180, dtype: float64

Correlation Coefficients for F1 Features:

fl\_garden 0.030962

fl\_furnished 0.028373

fl\_open\_fire -0.010919

fl\_terrace 0.029430

fl\_swimming\_pool 0.199632

fl\_double\_glazing 0.001419

dtype: float64

Cross-Validation Scores: [ 1.65071688e-01 -6.89053935e+07 4.86571172e-01 3.98716089e-01

3.98268713e-01]

Mean CV Score: -13781078.416892674

Standard Deviation of CV Scores: 27562157.55809918

Train score is: 0.4608471091855221

Test score is: 0.44658925768642055

Shape of X\_train: (60408, 28)

Shape of X\_test: (15103, 28)

Shape of y\_train: (60408,)

Shape of y\_test: (15103,)

Correlation Coefficients for Numerical Features:

cadastral\_income 0.000151

surface\_land\_sqm -0.002183

total\_area\_sqm 0.001492

construction\_year -0.004326

latitude -0.000586

longitude 0.001667

garden\_sqm -0.000102

primary\_energy\_consumption\_sqm -0.003754

nbr\_frontages 0.007487

nbr\_bedrooms 0.008392

terrace\_sqm -0.002451

dtype: float64

c:\Users\afshi\AppData\Local\Programs\Python\Python312\Lib\site-packages\numpy\lib\function\_base.py:2897: RuntimeWarning: invalid value encountered in divide

c /= stddev[:, None]

c:\Users\afshi\AppData\Local\Programs\Python\Python312\Lib\site-packages\numpy\lib\function\_base.py:2898: RuntimeWarning: invalid value encountered in divide

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Correlation Coefficients for Encoded Categorical Features:

property\_type\_APARTMENT -0.004276

property\_type\_HOUSE 0.004276

subproperty\_type\_APARTMENT -0.002038

subproperty\_type\_APARTMENT\_BLOCK 0.001837

subproperty\_type\_BUNGALOW 0.003525

...

equipped\_kitchen\_SEMI\_EQUIPPED 0.003553

equipped\_kitchen\_USA\_HYPER\_EQUIPPED 0.004211

equipped\_kitchen\_USA\_INSTALLED 0.001279

equipped\_kitchen\_USA\_SEMI\_EQUIPPED 0.006744

equipped\_kitchen\_USA\_UNINSTALLED -0.004711

Length: 1180, dtype: float64

Correlation Coefficients for F1 Features:

fl\_garden 0.030962

fl\_furnished 0.028373

fl\_open\_fire -0.010919

fl\_terrace 0.029430

fl\_swimming\_pool 0.199632

fl\_floodzone -0.062751

fl\_double\_glazing 0.001419

dtype: float64

Cross-Validation Scores: ['0.1650716884032163', '-68905393.53309104', '0.48657117187794696', '0.3987160885929285', '0.3982687128491218']

Mean CV Score: -13781078.416892674

Standard Deviation of CV Scores: 27562157.55809918

Train score is: 0.4608471091855221

Test score is: 0.44658925768642055