apple

February 27, 2022

1 Libraries

```
[12]: import pandas as pd
  import matplotlib.pyplot as plt
  from autots import AutoTS
  import warnings
  warnings.filterwarnings("ignore")
```

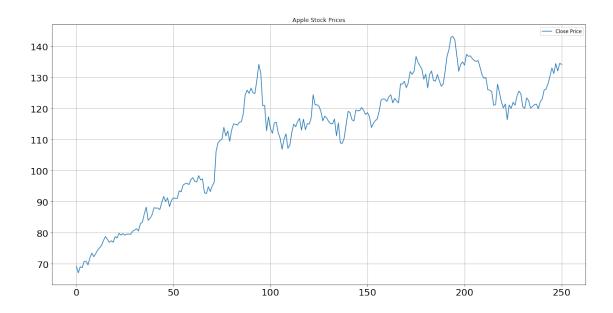
2 Dataset

```
[8]: data = pd.read_csv("AAPL.csv")
data.head()
```

```
[8]:
             Date
                       Open
                                 High
                                            Low
                                                     Close
                                                           Adj Close \
    0 2020-04-20
                  69.487503 70.419998 69.212502
                                                 69.232498
                                                           68.381073
    1 2020-04-21
                  69.070000 69.312500 66.357498
                                                 67.092499
                                                           66.267387
    2 2020-04-22
                  68.402496 69.474998 68.050003
                                                 69.025002
                                                           68.176125
    3 2020-04-23
                  68.967499 70.437500 68.717499
                                                 68.757500
                                                           67.911911
    4 2020-04-24 69.300003 70.752502 69.250000
                                                 70.742500
                                                           69.872505
```

Volume

- 0 130015200
- 1 180991600
- 2 116862400
- 3 124814400
- 4 126161200



3 Model (Auto TS)

```
[13]: | model = AutoTS(forecast_length=10, frequency='infer',
                     ensemble='simple', drop_data_older_than_periods=200)
      model = model.fit(data, date_col='Date', value_col='Close', id_col=None)
     Inferred frequency is: B
     Old data dropped by `drop_data_older_than_periods`.
     Model Number: 1 with model AverageValueNaive in generation 0 of 10
     Model Number: 2 with model AverageValueNaive in generation 0 of 10
     Model Number: 3 with model AverageValueNaive in generation 0 of 10
     Model Number: 4 with model DatepartRegression in generation 0 of 10
     Model Number: 5 with model DatepartRegression in generation 0 of 10
     Model Number: 6 with model DatepartRegression in generation 0 of 10
     Model Number: 7 with model DatepartRegression in generation 0 of 10
     Template Eval Error: ImportError('Tensorflow not available, install with pip
     install tensorflow.') in model 7: DatepartRegression
     Model Number: 8 with model ETS in generation 0 of 10
     Model Number: 9 with model ETS in generation 0 of 10
     Model Number: 10 with model GLM in generation 0 of 10
     Model Number: 11 with model GLM in generation 0 of 10
     Model Number: 12 with model GLS in generation 0 of 10
     Model Number: 13 with model GLS in generation 0 of 10
     Model Number: 14 with model GluonTS in generation 0 of 10
     Template Eval Error: ImportError('GluonTS installation not found or installed
     version is incompatible with AutoTS.') in model 14: GluonTS
     Model Number: 15 with model GluonTS in generation 0 of 10
     Template Eval Error: ImportError('GluonTS installation not found or installed
```

```
version is incompatible with AutoTS.') in model 15: GluonTS
Model Number: 16 with model GluonTS in generation 0 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 16: GluonTS
Model Number: 17 with model GluonTS in generation 0 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 17: GluonTS
Model Number: 18 with model GluonTS in generation 0 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 18: GluonTS
Model Number: 19 with model GluonTS in generation 0 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 19: GluonTS
Model Number: 20 with model LastValueNaive in generation 0 of 10
Model Number: 21 with model LastValueNaive in generation 0 of 10
Model Number: 22 with model LastValueNaive in generation 0 of 10
Model Number: 23 with model LastValueNaive in generation 0 of 10
Model Number: 24 with model SeasonalNaive in generation 0 of 10
Model Number: 25 with model SeasonalNaive in generation 0 of 10
Model Number: 26 with model SeasonalNaive in generation 0 of 10
Model Number: 27 with model SeasonalNaive in generation 0 of 10
Model Number: 28 with model UnobservedComponents in generation 0 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 28: UnobservedComponents
Model Number: 29 with model UnobservedComponents in generation 0 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 29: UnobservedComponents
Model Number: 30 with model UnobservedComponents in generation 0 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 30: UnobservedComponents
Model Number: 31 with model VAR in generation 0 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 31:
VAR
Model Number: 32 with model VAR in generation 0 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 32:
VAR
Model Number: 33 with model VAR in generation 0 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 33:
VAR
Model Number: 34 with model VECM in generation 0 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 34:
VECM
Model Number: 35 with model VECM in generation 0 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 35:
VECM
Model Number: 36 with model VECM in generation 0 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 36:
```

VECM

```
Model Number: 37 with model VECM in generation 0 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 37:
VECM
Model Number: 38 with model WindowRegression in generation 0 of 10
Model Number: 39 with model ZeroesNaive in generation 0 of 10
Model Number: 40 with model ZeroesNaive in generation 0 of 10
Model Number: 41 with model LastValueNaive in generation 0 of 10
Model Number: 42 with model AverageValueNaive in generation 0 of 10
Model Number: 43 with model GLS in generation 0 of 10
Model Number: 44 with model SeasonalNaive in generation 0 of 10
Model Number: 45 with model GLM in generation 0 of 10
Template Eval Error: ValueError('regression_type=user and no future_regressor
passed') in model 45: GLM
Model Number: 46 with model ETS in generation 0 of 10
Model Number: 47 with model FBProphet in generation 0 of 10
Template Eval Error: ImportError('Package prophet is required') in model 47:
FBProphet
Model Number: 48 with model GluonTS in generation 0 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 48: GluonTS
Model Number: 49 with model UnobservedComponents in generation 0 of 10
Model Number: 50 with model VAR in generation 0 of 10
Template Eval Error: IndexError('tuple index out of range') in model 50: VAR
Model Number: 51 with model VECM in generation 0 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 51:
VECM
Model Number: 52 with model WindowRegression in generation 0 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
passed") in model 52: WindowRegression
Model Number: 53 with model DatepartRegression in generation 0 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
passed") in model 53: DatepartRegression
Model Number: 54 with model UnivariateRegression in generation 0 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 54: UnivariateRegression
Model Number: 55 with model UnivariateMotif in generation 0 of 10
Model Number: 56 with model MultivariateMotif in generation 0 of 10
Model Number: 57 with model SectionalMotif in generation 0 of 10
Template Eval Error: ValueError("regression_type=='User' but no future_regressor
supplied") in model 57: SectionalMotif
Model Number: 58 with model NVAR in generation 0 of 10
Model Number: 59 with model Theta in generation 0 of 10
Model Number: 60 with model ARDL in generation 0 of 10
Template Eval Error: ImportError("cannot import name 'ARDL' from
'statsmodels.tsa.api' (C:\\Users\\jakar\\anaconda3\\lib\\site-
packages\\statsmodels\\tsa\\api.py)") in model 60: ARDL
Model Number: 61 with model ETS in generation 0 of 10
Model Number: 62 with model LastValueNaive in generation 0 of 10
```

```
Model Number: 63 with model MultivariateMotif in generation 0 of 10
Model Number: 64 with model SectionalMotif in generation 0 of 10
Model Number: 65 with model GLM in generation 0 of 10
Template Eval Error: ValueError('The first guess on the deviance function
returned a nan. This could be a boundary problem and should be reported.') in
model 65: GLM
Model Number: 66 with model WindowRegression in generation 0 of 10
Model Number: 67 with model GLM in generation 0 of 10
Template Eval Error: ValueError('regression_type=user and no future_regressor
passed') in model 67: GLM
Model Number: 68 with model LastValueNaive in generation 0 of 10
Model Number: 69 with model ETS in generation 0 of 10
Model Number: 70 with model LastValueNaive in generation 0 of 10
Model Number: 71 with model ETS in generation 0 of 10
Model Number: 72 with model DatepartRegression in generation 0 of 10
Model Number: 73 with model UnivariateMotif in generation 0 of 10
Model Number: 74 with model ZeroesNaive in generation 0 of 10
Model Number: 75 with model NVAR in generation 0 of 10
Model Number: 76 with model LastValueNaive in generation 0 of 10
Model Number: 77 with model VECM in generation 0 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 77:
VECM
Model Number: 78 with model GLS in generation 0 of 10
Model Number: 79 with model UnivariateRegression in generation 0 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 79: UnivariateRegression
Model Number: 80 with model VAR in generation 0 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 80:
Model Number: 81 with model AverageValueNaive in generation 0 of 10
Model Number: 82 with model UnivariateRegression in generation 0 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 82: UnivariateRegression
Model Number: 83 with model MultivariateMotif in generation 0 of 10
Model Number: 84 with model FBProphet in generation 0 of 10
Template Eval Error: ImportError('Package prophet is required') in model 84:
FBProphet
Model Number: 85 with model GLS in generation 0 of 10
Model Number: 86 with model GluonTS in generation 0 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 86: GluonTS
Model Number: 87 with model GLM in generation 0 of 10
Model Number: 88 with model ZeroesNaive in generation 0 of 10
Model Number: 89 with model ARDL in generation 0 of 10
Template Eval Error: ImportError("cannot import name 'ARDL' from
'statsmodels.tsa.api' (C:\\Users\\jakar\\anaconda3\\lib\\site-
packages\\statsmodels\\tsa\\api.py)") in model 89: ARDL
```

Model Number: 90 with model Theta in generation 0 of 10

```
Model Number: 91 with model SectionalMotif in generation 0 of 10
Model Number: 92 with model MultivariateMotif in generation 0 of 10
Model Number: 93 with model VAR in generation 0 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 93:
VAR
Model Number: 94 with model WindowRegression in generation 0 of 10
Model Number: 95 with model ETS in generation 0 of 10
Model Number: 96 with model GLS in generation 0 of 10
Model Number: 97 with model GluonTS in generation 0 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 97: GluonTS
Model Number: 98 with model AverageValueNaive in generation 0 of 10
Model Number: 99 with model DatepartRegression in generation 0 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
passed") in model 99: DatepartRegression
Model Number: 100 with model SeasonalNaive in generation 0 of 10
Model Number: 101 with model VECM in generation 0 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 101:
VECM
Model Number: 102 with model SeasonalNaive in generation 0 of 10
Model Number: 103 with model LastValueNaive in generation 0 of 10
Model Number: 104 with model DatepartRegression in generation 0 of 10
Template Eval Error: ValueError('Model DatepartRegression returned NaN for one
or more series') in model 104: DatepartRegression
Model Number: 105 with model DatepartRegression in generation 0 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
passed") in model 105: DatepartRegression
Model Number: 106 with model GLS in generation 0 of 10
Model Number: 107 with model ZeroesNaive in generation 0 of 10
Model Number: 108 with model GLS in generation 0 of 10
Model Number: 109 with model SectionalMotif in generation 0 of 10
Model Number: 110 with model WindowRegression in generation 0 of 10
Model Number: 111 with model VAR in generation 0 of 10
Template Eval Error: IndexError('tuple index out of range') in model 111: VAR
Model Number: 112 with model GluonTS in generation 0 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 112: GluonTS
Model Number: 113 with model UnobservedComponents in generation 0 of 10
Model Number: 114 with model UnivariateRegression in generation 0 of 10
Template Eval Error: ValueError("regression_type='User' but not future_regressor
supplied.") in model 114: UnivariateRegression
Model Number: 115 with model ETS in generation 0 of 10
Model Number: 116 with model ARDL in generation 0 of 10
Template Eval Error: ValueError("regression type='User' but future regressor not
supplied") in model 116: ARDL
Model Number: 117 with model LastValueNaive in generation 0 of 10
Model Number: 118 with model GLM in generation 0 of 10
```

Model Number: 119 with model GluonTS in generation 0 of 10

```
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 119: GluonTS
Model Number: 120 with model SectionalMotif in generation 0 of 10
Model Number: 121 with model UnobservedComponents in generation 0 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 121: UnobservedComponents
Model Number: 122 with model ETS in generation 0 of 10
Model Number: 123 with model WindowRegression in generation 0 of 10
Template Eval Error: KeyError('squared_error') in model 123: WindowRegression
Model Number: 124 with model GLM in generation 0 of 10
Model Number: 125 with model GluonTS in generation 0 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 125: GluonTS
Model Number: 126 with model GluonTS in generation 0 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 126: GluonTS
Model Number: 127 with model UnivariateMotif in generation 0 of 10
Model Number: 128 with model UnobservedComponents in generation 0 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 128: UnobservedComponents
Model Number: 129 with model NVAR in generation 0 of 10
Model Number: 130 with model MultivariateMotif in generation 0 of 10
Template Eval Error: ValueError('Model MultivariateMotif returned NaN for one or
more series') in model 130: MultivariateMotif
Model Number: 131 with model ETS in generation 0 of 10
Model Number: 132 with model VAR in generation 0 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 132:
VAR
Model Number: 133 with model UnobservedComponents in generation 0 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
supplied") in model 133: UnobservedComponents
Model Number: 134 with model MultivariateMotif in generation 0 of 10
Model Number: 135 with model SectionalMotif in generation 0 of 10
Model Number: 136 with model VECM in generation 0 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 136:
VECM
Model Number: 137 with model NVAR in generation 0 of 10
Model Number: 138 with model LastValueNaive in generation 0 of 10
Model Number: 139 with model FBProphet in generation 0 of 10
Template Eval Error: ImportError('Package prophet is required') in model 139:
FBProphet
Model Number: 140 with model SectionalMotif in generation 0 of 10
Model Number: 141 with model SectionalMotif in generation 0 of 10
Model Number: 142 with model ETS in generation 0 of 10
Model Number: 143 with model WindowRegression in generation 0 of 10
Model Number: 144 with model NVAR in generation 0 of 10
New Generation: 1 of 10
```

Model Number: 145 with model SectionalMotif in generation 1 of 10

```
Model Number: 146 with model SectionalMotif in generation 1 of 10
Model Number: 147 with model SectionalMotif in generation 1 of 10
Model Number: 148 with model SectionalMotif in generation 1 of 10
Model Number: 149 with model GLS in generation 1 of 10
Model Number: 150 with model GLS in generation 1 of 10
Model Number: 151 with model GLS in generation 1 of 10
Model Number: 152 with model GLM in generation 1 of 10
Model Number: 153 with model GLM in generation 1 of 10
Model Number: 154 with model GLM in generation 1 of 10
Model Number: 155 with model GLM in generation 1 of 10
Model Number: 156 with model ETS in generation 1 of 10
Model Number: 157 with model ETS in generation 1 of 10
Model Number: 158 with model ETS in generation 1 of 10
Model Number: 159 with model ETS in generation 1 of 10
Model Number: 160 with model ZeroesNaive in generation 1 of 10
Model Number: 161 with model ZeroesNaive in generation 1 of 10
Model Number: 162 with model ZeroesNaive in generation 1 of 10
Model Number: 163 with model Theta in generation 1 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 163: Theta
Model Number: 164 with model Theta in generation 1 of 10
Model Number: 165 with model Theta in generation 1 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 165: Theta
Model Number: 166 with model Theta in generation 1 of 10
Model Number: 167 with model WindowRegression in generation 1 of 10
Template Eval Error: KeyError('squared error') in model 167: WindowRegression
Model Number: 168 with model WindowRegression in generation 1 of 10
Template Eval Error: KeyError('squared error') in model 168: WindowRegression
Model Number: 169 with model WindowRegression in generation 1 of 10
Model Number: 170 with model AverageValueNaive in generation 1 of 10
Model Number: 171 with model AverageValueNaive in generation 1 of 10
Model Number: 172 with model AverageValueNaive in generation 1 of 10
Model Number: 173 with model LastValueNaive in generation 1 of 10
Model Number: 174 with model LastValueNaive in generation 1 of 10
Model Number: 175 with model LastValueNaive in generation 1 of 10
Model Number: 176 with model DatepartRegression in generation 1 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
passed") in model 176: DatepartRegression
Model Number: 177 with model DatepartRegression in generation 1 of 10
Template Eval Error: ImportError('Tensorflow not available, install with pip
install tensorflow.') in model 177: DatepartRegression
Model Number: 178 with model DatepartRegression in generation 1 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
passed") in model 178: DatepartRegression
Model Number: 179 with model NVAR in generation 1 of 10
Model Number: 180 with model NVAR in generation 1 of 10
Model Number: 181 with model NVAR in generation 1 of 10
```

```
Model Number: 182 with model NVAR in generation 1 of 10
Model Number: 183 with model UnivariateMotif in generation 1 of 10
Model Number: 184 with model UnivariateMotif in generation 1 of 10
Model Number: 185 with model UnivariateMotif in generation 1 of 10
Model Number: 186 with model UnivariateMotif in generation 1 of 10
Model Number: 187 with model SeasonalNaive in generation 1 of 10
Model Number: 188 with model SeasonalNaive in generation 1 of 10
Model Number: 189 with model SeasonalNaive in generation 1 of 10
Model Number: 190 with model SeasonalNaive in generation 1 of 10
Model Number: 191 with model UnobservedComponents in generation 1 of 10
Model Number: 192 with model UnobservedComponents in generation 1 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
supplied") in model 192: UnobservedComponents
Model Number: 193 with model UnobservedComponents in generation 1 of 10
Model Number: 194 with model MultivariateMotif in generation 1 of 10
Model Number: 195 with model MultivariateMotif in generation 1 of 10
Model Number: 196 with model MultivariateMotif in generation 1 of 10
Model Number: 197 with model MultivariateMotif in generation 1 of 10
Model Number: 198 with model GluonTS in generation 1 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 198: GluonTS
Model Number: 199 with model GluonTS in generation 1 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 199: GluonTS
Model Number: 200 with model GluonTS in generation 1 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 200: GluonTS
Model Number: 201 with model GluonTS in generation 1 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 201: GluonTS
Model Number: 202 with model VAR in generation 1 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 202:
VAR
Model Number: 203 with model VAR in generation 1 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 203:
VAR
Model Number: 204 with model VAR in generation 1 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 204:
VAR
Model Number: 205 with model VAR in generation 1 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 205:
VAR
Model Number: 206 with model VECM in generation 1 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 206:
VECM
Model Number: 207 with model VECM in generation 1 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 207:
VECM
```

```
Model Number: 209 with model VECM in generation 1 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 209:
VECM
Model Number: 210 with model FBProphet in generation 1 of 10
Template Eval Error: ImportError('Package prophet is required') in model 210:
FBProphet
Model Number: 211 with model FBProphet in generation 1 of 10
Template Eval Error: ImportError('Package prophet is required') in model 211:
Model Number: 212 with model FBProphet in generation 1 of 10
Template Eval Error: ImportError('Package prophet is required') in model 212:
Model Number: 213 with model FBProphet in generation 1 of 10
Template Eval Error: ImportError('Package prophet is required') in model 213:
Model Number: 214 with model UnivariateRegression in generation 1 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 214: UnivariateRegression
Model Number: 215 with model UnivariateRegression in generation 1 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 215: UnivariateRegression
Model Number: 216 with model UnivariateRegression in generation 1 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 216: UnivariateRegression
Model Number: 217 with model UnivariateRegression in generation 1 of 10
Template Eval Error: ValueError("regression_type='User' but not future_regressor
supplied.") in model 217: UnivariateRegression
Model Number: 218 with model ARDL in generation 1 of 10
Template Eval Error: ValueError("regression_type='User' but future_regressor not
supplied") in model 218: ARDL
Model Number: 219 with model ARDL in generation 1 of 10
Template Eval Error: ValueError("regression type='User' but future regressor not
supplied") in model 219: ARDL
Model Number: 220 with model ARDL in generation 1 of 10
Template Eval Error: ValueError("regression_type='User' but future_regressor not
supplied") in model 220: ARDL
Model Number: 221 with model ARDL in generation 1 of 10
Template Eval Error: ValueError("regression_type='User' but future_regressor not
supplied") in model 221: ARDL
New Generation: 2 of 10
Model Number: 222 with model SectionalMotif in generation 2 of 10
```

Template Eval Error: ValueError('Only gave one variable to VECM') in model 208:

Model Number: 208 with model VECM in generation 1 of 10

VECM

Model Number: 223 with model SectionalMotif in generation 2 of 10 Model Number: 224 with model SectionalMotif in generation 2 of 10 Model Number: 225 with model SectionalMotif in generation 2 of 10 Model Number: 226 with model AverageValueNaive in generation 2 of 10

```
Model Number: 227 with model AverageValueNaive in generation 2 of 10
Model Number: 228 with model AverageValueNaive in generation 2 of 10
Model Number: 229 with model GLS in generation 2 of 10
Model Number: 230 with model GLS in generation 2 of 10
Model Number: 231 with model GLS in generation 2 of 10
Model Number: 232 with model GLM in generation 2 of 10
Model Number: 233 with model GLM in generation 2 of 10
Template Eval Error: ValueError('regression_type=user and no future_regressor
passed') in model 233: GLM
Model Number: 234 with model GLM in generation 2 of 10
Model Number: 235 with model GLM in generation 2 of 10
Model Number: 236 with model ETS in generation 2 of 10
Model Number: 237 with model ETS in generation 2 of 10
Model Number: 238 with model ETS in generation 2 of 10
Model Number: 239 with model ETS in generation 2 of 10
Model Number: 240 with model ZeroesNaive in generation 2 of 10
Model Number: 241 with model ZeroesNaive in generation 2 of 10
Model Number: 242 with model ZeroesNaive in generation 2 of 10
Model Number: 243 with model Theta in generation 2 of 10
Model Number: 244 with model Theta in generation 2 of 10
Model Number: 245 with model Theta in generation 2 of 10
Model Number: 246 with model MultivariateMotif in generation 2 of 10
Model Number: 247 with model MultivariateMotif in generation 2 of 10
Model Number: 248 with model MultivariateMotif in generation 2 of 10
Model Number: 249 with model MultivariateMotif in generation 2 of 10
Model Number: 250 with model UnivariateMotif in generation 2 of 10
Model Number: 251 with model UnivariateMotif in generation 2 of 10
Model Number: 252 with model UnivariateMotif in generation 2 of 10
Model Number: 253 with model UnivariateMotif in generation 2 of 10
Model Number: 254 with model WindowRegression in generation 2 of 10
Template Eval Error: ValueError('Some value(s) of y are out of the valid range
for family PoissonDistribution') in model 254: WindowRegression
Model Number: 255 with model WindowRegression in generation 2 of 10
Model Number: 256 with model WindowRegression in generation 2 of 10
Template Eval Error: ImportError('Tensorflow not available, install with pip
install tensorflow.') in model 256: WindowRegression
Model Number: 257 with model LastValueNaive in generation 2 of 10
Model Number: 258 with model LastValueNaive in generation 2 of 10
Model Number: 259 with model LastValueNaive in generation 2 of 10
Model Number: 260 with model NVAR in generation 2 of 10
Model Number: 261 with model NVAR in generation 2 of 10
Model Number: 262 with model NVAR in generation 2 of 10
Model Number: 263 with model NVAR in generation 2 of 10
Model Number: 264 with model UnobservedComponents in generation 2 of 10
Model Number: 265 with model UnobservedComponents in generation 2 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 265: UnobservedComponents
Model Number: 266 with model UnobservedComponents in generation 2 of 10
```

```
Model Number: 267 with model DatepartRegression in generation 2 of 10
Template Eval Error: ValueError('Model DatepartRegression returned NaN for one
or more series') in model 267: DatepartRegression
Model Number: 268 with model DatepartRegression in generation 2 of 10
Template Eval Error: ValueError("regression type='User' but no future regressor
passed") in model 268: DatepartRegression
Model Number: 269 with model DatepartRegression in generation 2 of 10
Template Eval Error: ImportError('Tensorflow not available, install with pip
install tensorflow.') in model 269: DatepartRegression
Model Number: 270 with model SeasonalNaive in generation 2 of 10
Model Number: 271 with model SeasonalNaive in generation 2 of 10
Model Number: 272 with model SeasonalNaive in generation 2 of 10
Model Number: 273 with model SeasonalNaive in generation 2 of 10
Model Number: 274 with model GluonTS in generation 2 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 274: GluonTS
Model Number: 275 with model GluonTS in generation 2 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 275: GluonTS
Model Number: 276 with model GluonTS in generation 2 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 276: GluonTS
Model Number: 277 with model GluonTS in generation 2 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 277: GluonTS
Model Number: 278 with model VAR in generation 2 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 278:
VAR
Model Number: 279 with model VAR in generation 2 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 279:
VAR.
Model Number: 280 with model VAR in generation 2 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 280:
VAR
Model Number: 281 with model VAR in generation 2 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 281:
Model Number: 282 with model VECM in generation 2 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 282:
Model Number: 283 with model VECM in generation 2 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 283:
Model Number: 284 with model VECM in generation 2 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 284:
Model Number: 285 with model VECM in generation 2 of 10
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Template Eval Error: ValueError('Only gave one variable to VECM') in model 285:

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VECM
Model Number: 286 with model FBProphet in generation 2 of 10
Template Eval Error: ImportError('Package prophet is required') in model 286:
FBProphet
Model Number: 287 with model FBProphet in generation 2 of 10
Template Eval Error: ImportError('Package prophet is required') in model 287:
Model Number: 288 with model FBProphet in generation 2 of 10
Template Eval Error: ImportError('Package prophet is required') in model 288:
FBProphet
Model Number: 289 with model FBProphet in generation 2 of 10
Template Eval Error: ImportError('Package prophet is required') in model 289:
FBProphet
Model Number: 290 with model UnivariateRegression in generation 2 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 290: UnivariateRegression
Model Number: 291 with model UnivariateRegression in generation 2 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 291: UnivariateRegression
Model Number: 292 with model UnivariateRegression in generation 2 of 10
Template Eval Error: ValueError("regression type='User' but not future regressor
supplied.") in model 292: UnivariateRegression
Model Number: 293 with model UnivariateRegression in generation 2 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 293: UnivariateRegression
Model Number: 294 with model ARDL in generation 2 of 10
Template Eval Error: ImportError("cannot import name 'ARDL' from
'statsmodels.tsa.api' (C:\\Users\\jakar\\anaconda3\\lib\\site-
packages\\statsmodels\\tsa\\api.py)") in model 294: ARDL
Model Number: 295 with model ARDL in generation 2 of 10
Template Eval Error: ImportError("cannot import name 'ARDL' from
'statsmodels.tsa.api' (C:\\Users\\jakar\\anaconda3\\lib\\site-
packages\\statsmodels\\tsa\\api.py)") in model 295: ARDL
Model Number: 296 with model ARDL in generation 2 of 10
Template Eval Error: ImportError("cannot import name 'ARDL' from
'statsmodels.tsa.api' (C:\\Users\\jakar\\anaconda3\\lib\\site-
packages\\statsmodels\\tsa\\api.py)") in model 296: ARDL
Model Number: 297 with model ARDL in generation 2 of 10
Template Eval Error: ImportError("cannot import name 'ARDL' from
'statsmodels.tsa.api' (C:\\Users\\jakar\\anaconda3\\lib\\site-
packages\\statsmodels\\tsa\\api.py)") in model 297: ARDL
New Generation: 3 of 10
Model Number: 298 with model SectionalMotif in generation 3 of 10
Model Number: 299 with model Sectional Motif in generation 3 of 10
Model Number: 300 with model SectionalMotif in generation 3 of 10
Model Number: 301 with model SectionalMotif in generation 3 of 10
Model Number: 302 with model AverageValueNaive in generation 3 of 10
Model Number: 303 with model AverageValueNaive in generation 3 of 10
```

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Model Number: 304 with model AverageValueNaive in generation 3 of 10
Model Number: 305 with model ZeroesNaive in generation 3 of 10
Model Number: 306 with model ZeroesNaive in generation 3 of 10
Model Number: 307 with model ZeroesNaive in generation 3 of 10
Model Number: 308 with model GLS in generation 3 of 10
Model Number: 309 with model GLS in generation 3 of 10
Model Number: 310 with model GLS in generation 3 of 10
Model Number: 311 with model GLM in generation 3 of 10
Model Number: 312 with model GLM in generation 3 of 10
Model Number: 313 with model GLM in generation 3 of 10
Model Number: 314 with model GLM in generation 3 of 10
Template Eval Error: ValueError('The first guess on the deviance function
returned a nan.
                This could be a boundary problem and should be reported.') in
model 314: GLM
Model Number: 315 with model ETS in generation 3 of 10
Model Number: 316 with model ETS in generation 3 of 10
Model Number: 317 with model ETS in generation 3 of 10
Model Number: 318 with model ETS in generation 3 of 10
Model Number: 319 with model Theta in generation 3 of 10
Model Number: 320 with model Theta in generation 3 of 10
Model Number: 321 with model Theta in generation 3 of 10
Model Number: 322 with model Theta in generation 3 of 10
Model Number: 323 with model MultivariateMotif in generation 3 of 10
Model Number: 324 with model MultivariateMotif in generation 3 of 10
Model Number: 325 with model MultivariateMotif in generation 3 of 10
Model Number: 326 with model MultivariateMotif in generation 3 of 10
Model Number: 327 with model LastValueNaive in generation 3 of 10
Model Number: 328 with model LastValueNaive in generation 3 of 10
Model Number: 329 with model UnivariateMotif in generation 3 of 10
Model Number: 330 with model UnivariateMotif in generation 3 of 10
Model Number: 331 with model UnivariateMotif in generation 3 of 10
Model Number: 332 with model UnivariateMotif in generation 3 of 10
Model Number: 333 with model WindowRegression in generation 3 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
passed") in model 333: WindowRegression
Model Number: 334 with model WindowRegression in generation 3 of 10
Model Number: 335 with model WindowRegression in generation 3 of 10
Template Eval Error: ModuleNotFoundError("No module named 'lightgbm'") in model
335: WindowRegression
Model Number: 336 with model NVAR in generation 3 of 10
Model Number: 337 with model NVAR in generation 3 of 10
Model Number: 338 with model NVAR in generation 3 of 10
Model Number: 339 with model UnobservedComponents in generation 3 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
supplied") in model 339: UnobservedComponents
Model Number: 340 with model UnobservedComponents in generation 3 of 10
Model Number: 341 with model UnobservedComponents in generation 3 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
```

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supplied") in model 341: UnobservedComponents
Model Number: 342 with model DatepartRegression in generation 3 of 10
Model Number: 343 with model DatepartRegression in generation 3 of 10
Model Number: 344 with model DatepartRegression in generation 3 of 10
Template Eval Error: ValueError("regression type='User' but no future regressor
passed") in model 344: DatepartRegression
Model Number: 345 with model SeasonalNaive in generation 3 of 10
Model Number: 346 with model SeasonalNaive in generation 3 of 10
Model Number: 347 with model SeasonalNaive in generation 3 of 10
Model Number: 348 with model SeasonalNaive in generation 3 of 10
Model Number: 349 with model GluonTS in generation 3 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 349: GluonTS
Model Number: 350 with model GluonTS in generation 3 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 350: GluonTS
Model Number: 351 with model GluonTS in generation 3 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 351: GluonTS
Model Number: 352 with model GluonTS in generation 3 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 352: GluonTS
Model Number: 353 with model VAR in generation 3 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 353:
VAR
Model Number: 354 with model VAR in generation 3 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 354:
VAR
Model Number: 355 with model VAR in generation 3 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 355:
VAR.
Model Number: 356 with model VAR in generation 3 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 356:
VAR
Model Number: 357 with model VECM in generation 3 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 357:
VECM
Model Number: 358 with model VECM in generation 3 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 358:
VECM
Model Number: 359 with model VECM in generation 3 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
supplied") in model 359: VECM
Model Number: 360 with model FBProphet in generation 3 of 10
Template Eval Error: ImportError('Package prophet is required') in model 360:
Model Number: 361 with model FBProphet in generation 3 of 10
Template Eval Error: ImportError('Package prophet is required') in model 361:
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FBProphet Model Number: 362 with model FBProphet in generation 3 of 10 Template Eval Error: ImportError('Package prophet is required') in model 362: **FBProphet** Model Number: 363 with model FBProphet in generation 3 of 10 Template Eval Error: ImportError('Package prophet is required') in model 363: Model Number: 364 with model UnivariateRegression in generation 3 of 10 Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType' and 'int'") in model 364: UnivariateRegression Model Number: 365 with model UnivariateRegression in generation 3 of 10 Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType' and 'int'") in model 365: UnivariateRegression Model Number: 366 with model UnivariateRegression in generation 3 of 10 Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType' and 'int'") in model 366: UnivariateRegression Model Number: 367 with model UnivariateRegression in generation 3 of 10 Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType' and 'int'") in model 367: UnivariateRegression Model Number: 368 with model ARDL in generation 3 of 10 Template Eval Error: ImportError("cannot import name 'ARDL' from 'statsmodels.tsa.api' (C:\\Users\\jakar\\anaconda3\\lib\\sitepackages\\statsmodels\\tsa\\api.py)") in model 368: ARDL Model Number: 369 with model ARDL in generation 3 of 10 Template Eval Error: ValueError("regression_type='User' but future_regressor not supplied") in model 369: ARDL Model Number: 370 with model ARDL in generation 3 of 10 Template Eval Error: ImportError("cannot import name 'ARDL' from 'statsmodels.tsa.api' (C:\\Users\\jakar\\anaconda3\\lib\\sitepackages\\statsmodels\\tsa\\api.py)") in model 370: ARDL Model Number: 371 with model ARDL in generation 3 of 10 Template Eval Error: ValueError("regression_type='User' but future_regressor not supplied") in model 371: ARDL New Generation: 4 of 10 Model Number: 372 with model SectionalMotif in generation 4 of 10 Model Number: 373 with model SectionalMotif in generation 4 of 10 Model Number: 374 with model SectionalMotif in generation 4 of 10 Model Number: 375 with model DatepartRegression in generation 4 of 10 Template Eval Error: KeyError('squared_error') in model 375: DatepartRegression Model Number: 376 with model DatepartRegression in generation 4 of 10 Model Number: 377 with model DatepartRegression in generation 4 of 10 Template Eval Error: ValueError("regression_type='User' but no future_regressor passed") in model 377: DatepartRegression Model Number: 378 with model AverageValueNaive in generation 4 of 10 Model Number: 379 with model AverageValueNaive in generation 4 of 10 Model Number: 380 with model AverageValueNaive in generation 4 of 10 Model Number: 381 with model ZeroesNaive in generation 4 of 10 Model Number: 382 with model ZeroesNaive in generation 4 of 10

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Model Number: 383 with model ZeroesNaive in generation 4 of 10
Model Number: 384 with model GLM in generation 4 of 10
Model Number: 385 with model GLM in generation 4 of 10
Model Number: 386 with model GLM in generation 4 of 10
Model Number: 387 with model GLM in generation 4 of 10
Model Number: 388 with model GLS in generation 4 of 10
Model Number: 389 with model GLS in generation 4 of 10
Model Number: 390 with model GLS in generation 4 of 10
Model Number: 391 with model ETS in generation 4 of 10
Model Number: 392 with model ETS in generation 4 of 10
Model Number: 393 with model ETS in generation 4 of 10
Model Number: 394 with model Theta in generation 4 of 10
Template Eval Error: LinAlgError('SVD did not converge in Linear Least Squares')
in model 394: Theta
Model Number: 395 with model Theta in generation 4 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 395: Theta
Model Number: 396 with model Theta in generation 4 of 10
Model Number: 397 with model Theta in generation 4 of 10
Model Number: 398 with model MultivariateMotif in generation 4 of 10
Model Number: 399 with model MultivariateMotif in generation 4 of 10
Model Number: 400 with model MultivariateMotif in generation 4 of 10
Model Number: 401 with model LastValueNaive in generation 4 of 10
Model Number: 402 with model LastValueNaive in generation 4 of 10
Model Number: 403 with model LastValueNaive in generation 4 of 10
Model Number: 404 with model UnivariateMotif in generation 4 of 10
Model Number: 405 with model UnivariateMotif in generation 4 of 10
Model Number: 406 with model UnivariateMotif in generation 4 of 10
Model Number: 407 with model UnivariateMotif in generation 4 of 10
Model Number: 408 with model WindowRegression in generation 4 of 10
Template Eval Error: KeyError('squared_error') in model 408: WindowRegression
Model Number: 409 with model WindowRegression in generation 4 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
passed") in model 409: WindowRegression
Model Number: 410 with model WindowRegression in generation 4 of 10
Template Eval Error: ValueError('Found array with 0 sample(s) (shape=(0, 0))
while a minimum of 1 is required.') in model 410: WindowRegression
Model Number: 411 with model NVAR in generation 4 of 10
Model Number: 412 with model NVAR in generation 4 of 10
Model Number: 413 with model NVAR in generation 4 of 10
Model Number: 414 with model NVAR in generation 4 of 10
Model Number: 415 with model SeasonalNaive in generation 4 of 10
Model Number: 416 with model SeasonalNaive in generation 4 of 10
Model Number: 417 with model SeasonalNaive in generation 4 of 10
Model Number: 418 with model SeasonalNaive in generation 4 of 10
Model Number: 419 with model UnobservedComponents in generation 4 of 10
Model Number: 420 with model UnobservedComponents in generation 4 of 10
Model Number: 421 with model UnobservedComponents in generation 4 of 10
```

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Model Number: 422 with model GluonTS in generation 4 of 10
```

Template Eval Error: ImportError('GluonTS installation not found or installed

version is incompatible with AutoTS.') in model 422: GluonTS

Model Number: 423 with model GluonTS in generation 4 of 10

Template Eval Error: ImportError('GluonTS installation not found or installed

version is incompatible with ${\tt AutoTS.'}$) in model 423: GluonTS

Model Number: 424 with model GluonTS in generation 4 of 10

Template Eval Error: ImportError('GluonTS installation not found or installed

version is incompatible with AutoTS.') in model 424: GluonTS

Model Number: 425 with model GluonTS in generation 4 of 10

Template Eval Error: ImportError('GluonTS installation not found or installed

version is incompatible with AutoTS.') in model 425: GluonTS

Model Number: 426 with model VAR in generation 4 of 10

Template Eval Error: ValueError('Only gave one variable to VAR') in model 426:

Model Number: 427 with model VAR in generation 4 of 10

Template Eval Error: ValueError('Only gave one variable to VAR') in model 427:

VAR.

Model Number: 428 with model VAR in generation 4 of 10

Template Eval Error: ValueError('Only gave one variable to VAR') in model 428:

VAR

Model Number: 429 with model VAR in generation 4 of 10

Template Eval Error: ValueError('Only gave one variable to VAR') in model 429:

VAR.

Model Number: 430 with model VECM in generation 4 of 10

Template Eval Error: ValueError('Only gave one variable to VECM') in model 430:

VECM

Model Number: 431 with model VECM in generation 4 of 10

Template Eval Error: ValueError('Only gave one variable to VECM') in model 431:

VECM

Model Number: 432 with model VECM in generation 4 of 10

Template Eval Error: ValueError('Only gave one variable to VECM') in model 432:

VECM

Model Number: 433 with model VECM in generation 4 of 10

Template Eval Error: ValueError('Only gave one variable to VECM') in model 433:

VECM

Model Number: 434 with model FBProphet in generation 4 of 10

Template Eval Error: ImportError('Package prophet is required') in model 434:

FBProphet

Model Number: 435 with model FBProphet in generation 4 of 10

Template Eval Error: ImportError('Package prophet is required') in model 435:

FBProphet

Model Number: 436 with model FBProphet in generation 4 of 10

Template Eval Error: ImportError('Package prophet is required') in model 436:

FBProphet

Model Number: 437 with model FBProphet in generation 4 of 10

Template Eval Error: ImportError('Package prophet is required') in model 437:

FBProphet

```
Model Number: 438 with model UnivariateRegression in generation 4 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 438: UnivariateRegression
Model Number: 439 with model UnivariateRegression in generation 4 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 439: UnivariateRegression
Model Number: 440 with model UnivariateRegression in generation 4 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 440: UnivariateRegression
Model Number: 441 with model UnivariateRegression in generation 4 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 441: UnivariateRegression
Model Number: 442 with model ARDL in generation 4 of 10
Template Eval Error: ImportError("cannot import name 'ARDL' from
'statsmodels.tsa.api' (C:\\Users\\jakar\\anaconda3\\lib\\site-
packages\\statsmodels\\tsa\\api.py)") in model 442: ARDL
Model Number: 443 with model ARDL in generation 4 of 10
Template Eval Error: ImportError("cannot import name 'ARDL' from
'statsmodels.tsa.api' (C:\\Users\\jakar\\anaconda3\\lib\\site-
packages\\statsmodels\\tsa\\api.py)") in model 443: ARDL
Model Number: 444 with model ARDL in generation 4 of 10
Template Eval Error: ImportError("cannot import name 'ARDL' from
'statsmodels.tsa.api' (C:\\Users\\jakar\\anaconda3\\lib\\site-
packages\\statsmodels\\tsa\\api.py)") in model 444: ARDL
Model Number: 445 with model ARDL in generation 4 of 10
Template Eval Error: ImportError("cannot import name 'ARDL' from
'statsmodels.tsa.api' (C:\\Users\\jakar\\anaconda3\\lib\\site-
packages\\statsmodels\\tsa\\api.py)") in model 445: ARDL
New Generation: 5 of 10
Model Number: 446 with model SectionalMotif in generation 5 of 10
Model Number: 447 with model Sectional Motif in generation 5 of 10
Model Number: 448 with model SectionalMotif in generation 5 of 10
Model Number: 449 with model Sectional Motif in generation 5 of 10
Model Number: 450 with model GLM in generation 5 of 10
Model Number: 451 with model GLM in generation 5 of 10
Model Number: 452 with model GLM in generation 5 of 10
Model Number: 453 with model GLM in generation 5 of 10
Template Eval Error: ValueError('NaN, inf or invalid value detected in weights,
estimation infeasible.') in model 453: GLM
Model Number: 454 with model DatepartRegression in generation 5 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
passed") in model 454: DatepartRegression
Model Number: 455 with model DatepartRegression in generation 5 of 10
Model Number: 456 with model DatepartRegression in generation 5 of 10
Template Eval Error: KeyError('squared_error') in model 456: DatepartRegression
Model Number: 457 with model AverageValueNaive in generation 5 of 10
Model Number: 458 with model AverageValueNaive in generation 5 of 10
Model Number: 459 with model AverageValueNaive in generation 5 of 10
```

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Model Number: 460 with model ZeroesNaive in generation 5 of 10
Model Number: 461 with model ZeroesNaive in generation 5 of 10
Model Number: 462 with model GLS in generation 5 of 10
[Parallel(n_jobs=1)]: Using backend SequentialBackend with 1 concurrent workers.
Model Number: 463 with model GLS in generation 5 of 10
Model Number: 464 with model GLS in generation 5 of 10
Model Number: 465 with model MultivariateMotif in generation 5 of 10
Model Number: 466 with model MultivariateMotif in generation 5 of 10
Model Number: 467 with model MultivariateMotif in generation 5 of 10
Model Number: 468 with model MultivariateMotif in generation 5 of 10
Model Number: 469 with model ETS in generation 5 of 10
Model Number: 470 with model ETS in generation 5 of 10
Model Number: 471 with model ETS in generation 5 of 10
Model Number: 472 with model ETS in generation 5 of 10
Model Number: 473 with model Theta in generation 5 of 10
Model Number: 474 with model Theta in generation 5 of 10
Model Number: 475 with model Theta in generation 5 of 10
Model Number: 476 with model Theta in generation 5 of 10
Model Number: 477 with model UnivariateMotif in generation 5 of 10
Model Number: 478 with model UnivariateMotif in generation 5 of 10
Model Number: 479 with model UnivariateMotif in generation 5 of 10
Model Number: 480 with model UnivariateMotif in generation 5 of 10
Model Number: 481 with model LastValueNaive in generation 5 of 10
Model Number: 482 with model LastValueNaive in generation 5 of 10
Model Number: 483 with model LastValueNaive in generation 5 of 10
Model Number: 484 with model NVAR in generation 5 of 10
Model Number: 485 with model NVAR in generation 5 of 10
Model Number: 486 with model NVAR in generation 5 of 10
Model Number: 487 with model NVAR in generation 5 of 10
Model Number: 488 with model WindowRegression in generation 5 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
passed") in model 488: WindowRegression
Model Number: 489 with model WindowRegression in generation 5 of 10
Template Eval Error: ModuleNotFoundError("No module named 'xgboost'") in model
489: WindowRegression
Model Number: 490 with model WindowRegression in generation 5 of 10
Model Number: 491 with model UnobservedComponents in generation 5 of 10
Model Number: 492 with model UnobservedComponents in generation 5 of 10
Model Number: 493 with model UnobservedComponents in generation 5 of 10
Model Number: 494 with model SeasonalNaive in generation 5 of 10
Model Number: 495 with model SeasonalNaive in generation 5 of 10
Model Number: 496 with model SeasonalNaive in generation 5 of 10
Model Number: 497 with model SeasonalNaive in generation 5 of 10
Model Number: 498 with model GluonTS in generation 5 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 498: GluonTS
Model Number: 499 with model GluonTS in generation 5 of 10
```

```
Template Eval Error: ImportError('GluonTS installation not found or installed version is incompatible with AutoTS.') in model 499: GluonTS

Model Number: 500 with model GluonTS in generation 5 of 10

Template Eval Error: ImportError('GluonTS installation not found or installed version is incompatible with AutoTS.') in model 500: GluonTS

Model Number: 501 with model GluonTS in generation 5 of 10

Template Eval Error: ImportError('GluonTS installation not found or installed version is incompatible with AutoTS.') in model 501: GluonTS

Model Number: 502 with model VAR in generation 5 of 10

Template Eval Error: ValueError('Only gave one variable to VAR') in model 502: VAR
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Model Number: 503 with model VAR in generation 5 of 10

Template Eval Error: ValueError('Only gave one variable to VAR') in model 503: VAR

Model Number: 504 with model VAR in generation 5 of 10

Template Eval Error: ValueError('Only gave one variable to VAR') in model 504: VAR

Model Number: 505 with model VAR in generation 5 of 10

Template Eval Error: ValueError('Only gave one variable to VAR') in model 505: VAR

Model Number: 506 with model VECM in generation 5 of 10

Template Eval Error: ValueError('Only gave one variable to VECM') in model 506: VECM

Model Number: 507 with model VECM in generation 5 of 10

Template Eval Error: ValueError("regression_type='User' but no future_regressor supplied") in model 507: VECM

Model Number: 508 with model VECM in generation 5 of 10

Template Eval Error: ValueError('Only gave one variable to VECM') in model 508: VECM

Model Number: 509 with model VECM in generation 5 of 10

Template Eval Error: ValueError("regression_type='User' but no future_regressor supplied") in model 509: VECM

Model Number: 510 with model FBProphet in generation 5 of 10

Template Eval Error: ImportError('Package prophet is required') in model 510: FBProphet.

Model Number: 511 with model FBProphet in generation 5 of 10

Template Eval Error: ImportError('Package prophet is required') in model 511: FBProphet

Model Number: 512 with model FBProphet in generation 5 of 10

Template Eval Error: ImportError('Package prophet is required') in model 512: FBProphet

Model Number: 513 with model FBProphet in generation 5 of 10

Template Eval Error: ImportError('Package prophet is required') in model 513: FBProphet

Model Number: 514 with model UnivariateRegression in generation 5 of 10

Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'

and 'int'") in model 514: UnivariateRegression

Model Number: 515 with model UnivariateRegression in generation 5 of 10

```
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 515: UnivariateRegression
Model Number: 516 with model UnivariateRegression in generation 5 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 516: UnivariateRegression
Model Number: 517 with model UnivariateRegression in generation 5 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 517: UnivariateRegression
Model Number: 518 with model ARDL in generation 5 of 10
Template Eval Error: ImportError("cannot import name 'ARDL' from
'statsmodels.tsa.api' (C:\\Users\\jakar\\anaconda3\\lib\\site-
packages\\statsmodels\\tsa\\api.py)") in model 518: ARDL
Model Number: 519 with model ARDL in generation 5 of 10
Template Eval Error: ImportError("cannot import name 'ARDL' from
'statsmodels.tsa.api' (C:\\Users\\jakar\\anaconda3\\lib\\site-
packages\\statsmodels\\tsa\\api.py)") in model 519: ARDL
Model Number: 520 with model ARDL in generation 5 of 10
Template Eval Error: ValueError("regression_type='User' but future_regressor not
supplied") in model 520: ARDL
Model Number: 521 with model ARDL in generation 5 of 10
Template Eval Error: ValueError("regression_type='User' but future_regressor not
supplied") in model 521: ARDL
New Generation: 6 of 10
Model Number: 522 with model SeasonalNaive in generation 6 of 10
Model Number: 523 with model SeasonalNaive in generation 6 of 10
Model Number: 524 with model SeasonalNaive in generation 6 of 10
Model Number: 525 with model SeasonalNaive in generation 6 of 10
Model Number: 526 with model SectionalMotif in generation 6 of 10
Model Number: 527 with model Sectional Motif in generation 6 of 10
Model Number: 528 with model SectionalMotif in generation 6 of 10
Model Number: 529 with model SectionalMotif in generation 6 of 10
Model Number: 530 with model GLM in generation 6 of 10
Model Number: 531 with model GLM in generation 6 of 10
Model Number: 532 with model GLM in generation 6 of 10
Model Number: 533 with model GLM in generation 6 of 10
Model Number: 534 with model DatepartRegression in generation 6 of 10
Template Eval Error: KeyError('squared error') in model 534: DatepartRegression
Model Number: 535 with model DatepartRegression in generation 6 of 10
Template Eval Error: KeyError('squared_error') in model 535: DatepartRegression
Model Number: 536 with model DatepartRegression in generation 6 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
passed") in model 536: DatepartRegression
Model Number: 537 with model AverageValueNaive in generation 6 of 10
Model Number: 538 with model AverageValueNaive in generation 6 of 10
Model Number: 539 with model AverageValueNaive in generation 6 of 10
[Parallel(n_jobs=1)]: Using backend SequentialBackend with 1 concurrent workers.
```

Model Number: 540 with model Theta in generation 6 of 10

```
Model Number: 541 with model Theta in generation 6 of 10
Model Number: 542 with model Theta in generation 6 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 542: Theta
Model Number: 543 with model Theta in generation 6 of 10
Model Number: 544 with model MultivariateMotif in generation 6 of 10
Model Number: 545 with model MultivariateMotif in generation 6 of 10
Model Number: 546 with model MultivariateMotif in generation 6 of 10
Model Number: 547 with model MultivariateMotif in generation 6 of 10
Model Number: 548 with model ZeroesNaive in generation 6 of 10
Model Number: 549 with model ZeroesNaive in generation 6 of 10
Model Number: 550 with model ZeroesNaive in generation 6 of 10
Model Number: 551 with model GLS in generation 6 of 10
Model Number: 552 with model GLS in generation 6 of 10
Model Number: 553 with model GLS in generation 6 of 10
Model Number: 554 with model ETS in generation 6 of 10
Model Number: 555 with model ETS in generation 6 of 10
Model Number: 556 with model ETS in generation 6 of 10
Model Number: 557 with model ETS in generation 6 of 10
Model Number: 558 with model UnivariateMotif in generation 6 of 10
Model Number: 559 with model UnivariateMotif in generation 6 of 10
Template Eval Error: ValueError('Model UnivariateMotif returned NaN for one or
more series') in model 559: UnivariateMotif
Model Number: 560 with model UnivariateMotif in generation 6 of 10
Model Number: 561 with model UnivariateMotif in generation 6 of 10
Model Number: 562 with model LastValueNaive in generation 6 of 10
Model Number: 563 with model LastValueNaive in generation 6 of 10
Model Number: 564 with model NVAR in generation 6 of 10
Model Number: 565 with model NVAR in generation 6 of 10
Model Number: 566 with model NVAR in generation 6 of 10
Model Number: 567 with model NVAR in generation 6 of 10
Model Number: 568 with model WindowRegression in generation 6 of 10
Model Number: 569 with model WindowRegression in generation 6 of 10
Model Number: 570 with model WindowRegression in generation 6 of 10
Template Eval Error: ValueError("regression type='User' but no future regressor
passed") in model 570: WindowRegression
Model Number: 571 with model UnobservedComponents in generation 6 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
supplied") in model 571: UnobservedComponents
Model Number: 572 with model UnobservedComponents in generation 6 of 10
Model Number: 573 with model UnobservedComponents in generation 6 of 10
Model Number: 574 with model GluonTS in generation 6 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 574: GluonTS
Model Number: 575 with model GluonTS in generation 6 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 575: GluonTS
Model Number: 576 with model GluonTS in generation 6 of 10
```

```
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 576: GluonTS
Model Number: 577 with model GluonTS in generation 6 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 577: GluonTS
Model Number: 578 with model VAR in generation 6 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 578:
VAR
Model Number: 579 with model VAR in generation 6 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 579:
VAR
Model Number: 580 with model VAR in generation 6 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 580:
VAR.
Model Number: 581 with model VAR in generation 6 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 581:
VAR.
Model Number: 582 with model VECM in generation 6 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 582:
VECM
Model Number: 583 with model VECM in generation 6 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 583:
Model Number: 584 with model VECM in generation 6 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 584:
VECM
Model Number: 585 with model VECM in generation 6 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 585:
Model Number: 586 with model FBProphet in generation 6 of 10
Template Eval Error: ImportError('Package prophet is required') in model 586:
Model Number: 587 with model FBProphet in generation 6 of 10
Template Eval Error: ImportError('Package prophet is required') in model 587:
Model Number: 588 with model FBProphet in generation 6 of 10
Template Eval Error: ImportError('Package prophet is required') in model 588:
FBProphet
Model Number: 589 with model FBProphet in generation 6 of 10
Template Eval Error: ImportError('Package prophet is required') in model 589:
FBProphet
Model Number: 590 with model UnivariateRegression in generation 6 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 590: UnivariateRegression
Model Number: 591 with model UnivariateRegression in generation 6 of 10
```

Template Eval Error: ValueError("regression_type='User' but not future_regressor

Model Number: 592 with model UnivariateRegression in generation 6 of 10

supplied.") in model 591: UnivariateRegression

```
Template Eval Error: ValueError("regression_type='User' but not future_regressor
supplied.") in model 592: UnivariateRegression
Model Number: 593 with model UnivariateRegression in generation 6 of 10
Template Eval Error: ValueError("regression_type='User' but not future_regressor
supplied.") in model 593: UnivariateRegression
Model Number: 594 with model ARDL in generation 6 of 10
Template Eval Error: ValueError("regression type='User' but future regressor not
supplied") in model 594: ARDL
Model Number: 595 with model ARDL in generation 6 of 10
Template Eval Error: ValueError("regression_type='User' but future_regressor not
supplied") in model 595: ARDL
Model Number: 596 with model ARDL in generation 6 of 10
Template Eval Error: ValueError("regression_type='User' but future_regressor not
supplied") in model 596: ARDL
Model Number: 597 with model ARDL in generation 6 of 10
Template Eval Error: ValueError("regression type='User' but future regressor not
supplied") in model 597: ARDL
New Generation: 7 of 10
Model Number: 598 with model SeasonalNaive in generation 7 of 10
Model Number: 599 with model SeasonalNaive in generation 7 of 10
Model Number: 600 with model SeasonalNaive in generation 7 of 10
Model Number: 601 with model SeasonalNaive in generation 7 of 10
Model Number: 602 with model NVAR in generation 7 of 10
Model Number: 603 with model NVAR in generation 7 of 10
Model Number: 604 with model NVAR in generation 7 of 10
Model Number: 605 with model NVAR in generation 7 of 10
Template Eval Error: ValueError('Shape of passed values is (190, 191), indices
imply (190, 1)') in model 605: NVAR
Model Number: 606 with model SectionalMotif in generation 7 of 10
Model Number: 607 with model SectionalMotif in generation 7 of 10
Model Number: 608 with model SectionalMotif in generation 7 of 10
Model Number: 609 with model SectionalMotif in generation 7 of 10
Model Number: 610 with model GLM in generation 7 of 10
Model Number: 611 with model GLM in generation 7 of 10
Model Number: 612 with model GLM in generation 7 of 10
Model Number: 613 with model GLM in generation 7 of 10
Model Number: 614 with model DatepartRegression in generation 7 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
passed") in model 614: DatepartRegression
Model Number: 615 with model DatepartRegression in generation 7 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
passed") in model 615: DatepartRegression
Model Number: 616 with model DatepartRegression in generation 7 of 10
Template Eval Error: KeyError('squared error') in model 616: DatepartRegression
Model Number: 617 with model AverageValueNaive in generation 7 of 10
Model Number: 618 with model AverageValueNaive in generation 7 of 10
```

Model Number: 619 with model AverageValueNaive in generation 7 of 10

```
[Parallel(n_jobs=1)]: Using backend SequentialBackend with 1 concurrent workers.
Model Number: 620 with model Theta in generation 7 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 620: Theta
Model Number: 621 with model Theta in generation 7 of 10
Model Number: 622 with model Theta in generation 7 of 10
Model Number: 623 with model Theta in generation 7 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 623: Theta
Model Number: 624 with model MultivariateMotif in generation 7 of 10
Model Number: 625 with model MultivariateMotif in generation 7 of 10
Model Number: 626 with model MultivariateMotif in generation 7 of 10
Model Number: 627 with model MultivariateMotif in generation 7 of 10
Model Number: 628 with model ZeroesNaive in generation 7 of 10
Model Number: 629 with model ZeroesNaive in generation 7 of 10
Model Number: 630 with model GLS in generation 7 of 10
Model Number: 631 with model GLS in generation 7 of 10
Model Number: 632 with model ETS in generation 7 of 10
Model Number: 633 with model ETS in generation 7 of 10
Model Number: 634 with model ETS in generation 7 of 10
Model Number: 635 with model ETS in generation 7 of 10
Model Number: 636 with model UnivariateMotif in generation 7 of 10
Model Number: 637 with model UnivariateMotif in generation 7 of 10
Model Number: 638 with model UnivariateMotif in generation 7 of 10
Model Number: 639 with model UnivariateMotif in generation 7 of 10
Model Number: 640 with model LastValueNaive in generation 7 of 10
Model Number: 641 with model LastValueNaive in generation 7 of 10
Model Number: 642 with model LastValueNaive in generation 7 of 10
Model Number: 643 with model WindowRegression in generation 7 of 10
Model Number: 644 with model WindowRegression in generation 7 of 10
Model Number: 645 with model WindowRegression in generation 7 of 10
Model Number: 646 with model UnobservedComponents in generation 7 of 10
Model Number: 647 with model UnobservedComponents in generation 7 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
supplied") in model 647: UnobservedComponents
Model Number: 648 with model UnobservedComponents in generation 7 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
supplied") in model 648: UnobservedComponents
Model Number: 649 with model GluonTS in generation 7 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 649: GluonTS
Model Number: 650 with model GluonTS in generation 7 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 650: GluonTS
Model Number: 651 with model GluonTS in generation 7 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 651: GluonTS
```

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Model Number: 652 with model GluonTS in generation 7 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 652: GluonTS
Model Number: 653 with model VAR in generation 7 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 653:
Model Number: 654 with model VAR in generation 7 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 654:
Model Number: 655 with model VAR in generation 7 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 655:
Model Number: 656 with model VAR in generation 7 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 656:
Model Number: 657 with model VECM in generation 7 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 657:
VECM
Model Number: 658 with model VECM in generation 7 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 658:
Model Number: 659 with model VECM in generation 7 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 659:
VECM
Model Number: 660 with model VECM in generation 7 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 660:
VECM
Model Number: 661 with model FBProphet in generation 7 of 10
Template Eval Error: ImportError('Package prophet is required') in model 661:
FBProphet
Model Number: 662 with model FBProphet in generation 7 of 10
Template Eval Error: ImportError('Package prophet is required') in model 662:
FBProphet
Model Number: 663 with model FBProphet in generation 7 of 10
Template Eval Error: ImportError('Package prophet is required') in model 663:
FBProphet
Model Number: 664 with model FBProphet in generation 7 of 10
Template Eval Error: ImportError('Package prophet is required') in model 664:
FBProphet
Model Number: 665 with model UnivariateRegression in generation 7 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 665: UnivariateRegression
Model Number: 666 with model UnivariateRegression in generation 7 of 10
Template Eval Error: ValueError("regression_type='User' but not future_regressor
supplied.") in model 666: UnivariateRegression
Model Number: 667 with model UnivariateRegression in generation 7 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
```

and 'int'") in model 667: UnivariateRegression

```
Model Number: 668 with model UnivariateRegression in generation 7 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 668: UnivariateRegression
Model Number: 669 with model ARDL in generation 7 of 10
Template Eval Error: ImportError("cannot import name 'ARDL' from
'statsmodels.tsa.api' (C:\\Users\\jakar\\anaconda3\\lib\\site-
packages\\statsmodels\\tsa\\api.py)") in model 669: ARDL
Model Number: 670 with model ARDL in generation 7 of 10
Template Eval Error: ValueError("regression_type='User' but future_regressor not
supplied") in model 670: ARDL
Model Number: 671 with model ARDL in generation 7 of 10
Template Eval Error: ImportError("cannot import name 'ARDL' from
'statsmodels.tsa.api' (C:\\Users\\jakar\\anaconda3\\lib\\site-
packages\\statsmodels\\tsa\\api.py)") in model 671: ARDL
Model Number: 672 with model ARDL in generation 7 of 10
Template Eval Error: ValueError("regression type='User' but future regressor not
supplied") in model 672: ARDL
New Generation: 8 of 10
Model Number: 673 with model SeasonalNaive in generation 8 of 10
Model Number: 674 with model SeasonalNaive in generation 8 of 10
Model Number: 675 with model SeasonalNaive in generation 8 of 10
Model Number: 676 with model SeasonalNaive in generation 8 of 10
Model Number: 677 with model NVAR in generation 8 of 10
Model Number: 678 with model NVAR in generation 8 of 10
Model Number: 679 with model NVAR in generation 8 of 10
Template Eval Error: ValueError('Shape of passed values is (183, 184), indices
imply (183, 1)') in model 679: NVAR
Model Number: 680 with model NVAR in generation 8 of 10
Model Number: 681 with model Sectional Motif in generation 8 of 10
Model Number: 682 with model SectionalMotif in generation 8 of 10
Template Eval Error: ValueError("regression_type=='User' but no future_regressor
supplied") in model 682: SectionalMotif
Model Number: 683 with model Sectional Motif in generation 8 of 10
Model Number: 684 with model SectionalMotif in generation 8 of 10
Model Number: 685 with model GLM in generation 8 of 10
Template Eval Error: ValueError('The first guess on the deviance function
returned a nan. This could be a boundary problem and should be reported.') in
model 685: GLM
Model Number: 686 with model GLM in generation 8 of 10
Model Number: 687 with model GLM in generation 8 of 10
Model Number: 688 with model GLM in generation 8 of 10
Model Number: 689 with model DatepartRegression in generation 8 of 10
Template Eval Error: ImportError('Tensorflow not available, install with pip
install tensorflow.') in model 689: DatepartRegression
Model Number: 690 with model DatepartRegression in generation 8 of 10
Model Number: 691 with model DatepartRegression in generation 8 of 10
Template Eval Error: ImportError('Tensorflow not available, install with pip
install tensorflow.') in model 691: DatepartRegression
```

```
Model Number: 692 with model AverageValueNaive in generation 8 of 10
Model Number: 693 with model AverageValueNaive in generation 8 of 10
Model Number: 694 with model AverageValueNaive in generation 8 of 10
Model Number: 695 with model Theta in generation 8 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 695: Theta
Model Number: 696 with model Theta in generation 8 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 696: Theta
Model Number: 697 with model Theta in generation 8 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 697: Theta
Model Number: 698 with model Theta in generation 8 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 698: Theta
Model Number: 699 with model GLS in generation 8 of 10
Model Number: 700 with model GLS in generation 8 of 10
Model Number: 701 with model GLS in generation 8 of 10
Model Number: 702 with model WindowRegression in generation 8 of 10
Model Number: 703 with model WindowRegression in generation 8 of 10
Template Eval Error: ValueError("Input contains NaN, infinity or a value too
large for dtype('float64').") in model 703: WindowRegression
Model Number: 704 with model WindowRegression in generation 8 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
passed") in model 704: WindowRegression
Model Number: 705 with model MultivariateMotif in generation 8 of 10
Model Number: 706 with model MultivariateMotif in generation 8 of 10
Model Number: 707 with model MultivariateMotif in generation 8 of 10
Model Number: 708 with model MultivariateMotif in generation 8 of 10
Model Number: 709 with model ETS in generation 8 of 10
Model Number: 710 with model ETS in generation 8 of 10
Model Number: 711 with model ETS in generation 8 of 10
Model Number: 712 with model ETS in generation 8 of 10
Model Number: 713 with model ZeroesNaive in generation 8 of 10
Model Number: 714 with model ZeroesNaive in generation 8 of 10
Model Number: 715 with model ZeroesNaive in generation 8 of 10
Model Number: 716 with model UnivariateMotif in generation 8 of 10
Model Number: 717 with model UnivariateMotif in generation 8 of 10
Template Eval Error: ValueError('Model UnivariateMotif returned NaN for one or
more series') in model 717: UnivariateMotif
Model Number: 718 with model UnivariateMotif in generation 8 of 10
Model Number: 719 with model UnivariateMotif in generation 8 of 10
Model Number: 720 with model LastValueNaive in generation 8 of 10
Model Number: 721 with model LastValueNaive in generation 8 of 10
Model Number: 722 with model LastValueNaive in generation 8 of 10
Model Number: 723 with model UnobservedComponents in generation 8 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 723: UnobservedComponents
```

```
Model Number: 724 with model UnobservedComponents in generation 8 of 10
Model Number: 725 with model UnobservedComponents in generation 8 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 725: UnobservedComponents
Model Number: 726 with model GluonTS in generation 8 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 726: GluonTS
Model Number: 727 with model GluonTS in generation 8 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 727: GluonTS
Model Number: 728 with model GluonTS in generation 8 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 728: GluonTS
Model Number: 729 with model GluonTS in generation 8 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 729: GluonTS
Model Number: 730 with model VAR in generation 8 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 730:
VAR
Model Number: 731 with model VAR in generation 8 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 731:
VAR
Model Number: 732 with model VAR in generation 8 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 732:
VAR
Model Number: 733 with model VAR in generation 8 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 733:
VAR
Model Number: 734 with model VECM in generation 8 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 734:
VECM
Model Number: 735 with model VECM in generation 8 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 735:
VECM
Model Number: 736 with model VECM in generation 8 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 736:
VECM
Model Number: 737 with model VECM in generation 8 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 737:
VECM
Model Number: 738 with model FBProphet in generation 8 of 10
Template Eval Error: ImportError('Package prophet is required') in model 738:
Model Number: 739 with model FBProphet in generation 8 of 10
Template Eval Error: ImportError('Package prophet is required') in model 739:
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Template Eval Error: ImportError('Package prophet is required') in model 740:

Model Number: 740 with model FBProphet in generation 8 of 10

FBProphet Model Number: 741 with model FBProphet in generation 8 of 10 Template Eval Error: ImportError('Package prophet is required') in model 741: **FBProphet** Model Number: 742 with model UnivariateRegression in generation 8 of 10 Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType' and 'int'") in model 742: UnivariateRegression Model Number: 743 with model UnivariateRegression in generation 8 of 10 Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType' and 'int'") in model 743: UnivariateRegression Model Number: 744 with model UnivariateRegression in generation 8 of 10 Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType' and 'int'") in model 744: UnivariateRegression Model Number: 745 with model UnivariateRegression in generation 8 of 10 Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType' and 'int'") in model 745: UnivariateRegression Model Number: 746 with model ARDL in generation 8 of 10 Template Eval Error: ImportError("cannot import name 'ARDL' from 'statsmodels.tsa.api' (C:\\Users\\jakar\\anaconda3\\lib\\sitepackages\\statsmodels\\tsa\\api.py)") in model 746: ARDL Model Number: 747 with model ARDL in generation 8 of 10 Template Eval Error: ValueError("regression_type='User' but future_regressor not supplied") in model 747: ARDL Model Number: 748 with model ARDL in generation 8 of 10 Template Eval Error: ImportError("cannot import name 'ARDL' from 'statsmodels.tsa.api' (C:\\Users\\jakar\\anaconda3\\lib\\sitepackages\\statsmodels\\tsa\\api.py)") in model 748: ARDL Model Number: 749 with model ARDL in generation 8 of 10 Template Eval Error: ImportError("cannot import name 'ARDL' from 'statsmodels.tsa.api' (C:\\Users\\jakar\\anaconda3\\lib\\sitepackages\\statsmodels\\tsa\\api.py)") in model 749: ARDL New Generation: 9 of 10 Model Number: 750 with model SeasonalNaive in generation 9 of 10 Model Number: 751 with model SeasonalNaive in generation 9 of 10 Model Number: 752 with model SeasonalNaive in generation 9 of 10 Model Number: 753 with model MultivariateMotif in generation 9 of 10 Model Number: 754 with model MultivariateMotif in generation 9 of 10 Model Number: 755 with model MultivariateMotif in generation 9 of 10 Model Number: 756 with model MultivariateMotif in generation 9 of 10 Model Number: 757 with model NVAR in generation 9 of 10 Model Number: 758 with model NVAR in generation 9 of 10 Model Number: 759 with model NVAR in generation 9 of 10 Model Number: 760 with model NVAR in generation 9 of 10 Model Number: 761 with model Sectional Motif in generation 9 of 10 Model Number: 762 with model SectionalMotif in generation 9 of 10 Model Number: 763 with model Sectional Motif in generation 9 of 10 Model Number: 764 with model SectionalMotif in generation 9 of 10 Model Number: 765 with model GLM in generation 9 of 10

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Model Number: 766 with model GLM in generation 9 of 10
Model Number: 767 with model GLM in generation 9 of 10
Model Number: 768 with model GLM in generation 9 of 10
Model Number: 769 with model DatepartRegression in generation 9 of 10
Template Eval Error: ValueError("regression type='User' but no future regressor
passed") in model 769: DatepartRegression
Model Number: 770 with model DatepartRegression in generation 9 of 10
Template Eval Error: ImportError('Tensorflow not available, install with pip
install tensorflow.') in model 770: DatepartRegression
Model Number: 771 with model DatepartRegression in generation 9 of 10
Model Number: 772 with model AverageValueNaive in generation 9 of 10
Model Number: 773 with model AverageValueNaive in generation 9 of 10
Model Number: 774 with model AverageValueNaive in generation 9 of 10
Model Number: 775 with model Theta in generation 9 of 10
Model Number: 776 with model Theta in generation 9 of 10
Model Number: 777 with model Theta in generation 9 of 10
Model Number: 778 with model Theta in generation 9 of 10
Model Number: 779 with model GLS in generation 9 of 10
Model Number: 780 with model GLS in generation 9 of 10
Model Number: 781 with model GLS in generation 9 of 10
Model Number: 782 with model WindowRegression in generation 9 of 10
Model Number: 783 with model WindowRegression in generation 9 of 10
Model Number: 784 with model WindowRegression in generation 9 of 10
Template Eval Error: ImportError('Tensorflow not available, install with pip
install tensorflow.') in model 784: WindowRegression
Model Number: 785 with model ETS in generation 9 of 10
Model Number: 786 with model ETS in generation 9 of 10
Model Number: 787 with model ETS in generation 9 of 10
Model Number: 788 with model ETS in generation 9 of 10
Model Number: 789 with model ZeroesNaive in generation 9 of 10
Model Number: 790 with model ZeroesNaive in generation 9 of 10
Model Number: 791 with model ZeroesNaive in generation 9 of 10
Model Number: 792 with model UnivariateMotif in generation 9 of 10
Model Number: 793 with model UnivariateMotif in generation 9 of 10
Model Number: 794 with model UnivariateMotif in generation 9 of 10
Model Number: 795 with model UnivariateMotif in generation 9 of 10
Model Number: 796 with model LastValueNaive in generation 9 of 10
Model Number: 797 with model LastValueNaive in generation 9 of 10
Model Number: 798 with model LastValueNaive in generation 9 of 10
Model Number: 799 with model UnobservedComponents in generation 9 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
supplied") in model 799: UnobservedComponents
Model Number: 800 with model UnobservedComponents in generation 9 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 800: UnobservedComponents
Model Number: 801 with model UnobservedComponents in generation 9 of 10
Model Number: 802 with model GluonTS in generation 9 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
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version is incompatible with AutoTS.') in model 802: GluonTS
Model Number: 803 with model GluonTS in generation 9 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 803: GluonTS
Model Number: 804 with model GluonTS in generation 9 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 804: GluonTS
Model Number: 805 with model GluonTS in generation 9 of 10
Template Eval Error: ImportError('GluonTS installation not found or installed
version is incompatible with AutoTS.') in model 805: GluonTS
Model Number: 806 with model VAR in generation 9 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 806:
VAR
Model Number: 807 with model VAR in generation 9 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 807:
VAR.
Model Number: 808 with model VAR in generation 9 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 808:
VAR
Model Number: 809 with model VAR in generation 9 of 10
Template Eval Error: ValueError('Only gave one variable to VAR') in model 809:
VAR
Model Number: 810 with model VECM in generation 9 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 810:
VECM
Model Number: 811 with model VECM in generation 9 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 811:
VECM
Model Number: 812 with model VECM in generation 9 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 812:
VECM
Model Number: 813 with model VECM in generation 9 of 10
Template Eval Error: ValueError('Only gave one variable to VECM') in model 813:
VECM
Model Number: 814 with model FBProphet in generation 9 of 10
Template Eval Error: ImportError('Package prophet is required') in model 814:
FBProphet
Model Number: 815 with model FBProphet in generation 9 of 10
Template Eval Error: ImportError('Package prophet is required') in model 815:
FBProphet
Model Number: 816 with model FBProphet in generation 9 of 10
Template Eval Error: ImportError('Package prophet is required') in model 816:
Model Number: 817 with model FBProphet in generation 9 of 10
Template Eval Error: ImportError('Package prophet is required') in model 817:
Model Number: 818 with model UnivariateRegression in generation 9 of 10
```

Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'

```
and 'int'") in model 818: UnivariateRegression
Model Number: 819 with model UnivariateRegression in generation 9 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 819: UnivariateRegression
Model Number: 820 with model UnivariateRegression in generation 9 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 820: UnivariateRegression
Model Number: 821 with model UnivariateRegression in generation 9 of 10
Template Eval Error: TypeError("unsupported operand type(s) for -: 'NoneType'
and 'int'") in model 821: UnivariateRegression
Model Number: 822 with model ARDL in generation 9 of 10
Template Eval Error: ValueError("regression type='User' but future regressor not
supplied") in model 822: ARDL
Model Number: 823 with model ARDL in generation 9 of 10
Template Eval Error: ValueError("regression_type='User' but future_regressor not
supplied") in model 823: ARDL
Model Number: 824 with model ARDL in generation 9 of 10
Template Eval Error: ValueError("regression_type='User' but future_regressor_not
supplied") in model 824: ARDL
Model Number: 825 with model ARDL in generation 9 of 10
Template Eval Error: ValueError("regression_type='User' but future_regressor not
supplied") in model 825: ARDL
New Generation: 10 of 10
Model Number: 826 with model SeasonalNaive in generation 10 of 10
Model Number: 827 with model SeasonalNaive in generation 10 of 10
Model Number: 828 with model SeasonalNaive in generation 10 of 10
Model Number: 829 with model SeasonalNaive in generation 10 of 10
Model Number: 830 with model MultivariateMotif in generation 10 of 10
Model Number: 831 with model MultivariateMotif in generation 10 of 10
Model Number: 832 with model MultivariateMotif in generation 10 of 10
Model Number: 833 with model MultivariateMotif in generation 10 of 10
Model Number: 834 with model NVAR in generation 10 of 10
Model Number: 835 with model NVAR in generation 10 of 10
Model Number: 836 with model NVAR in generation 10 of 10
Model Number: 837 with model NVAR in generation 10 of 10
Model Number: 838 with model SectionalMotif in generation 10 of 10
Model Number: 839 with model SectionalMotif in generation 10 of 10
Model Number: 840 with model SectionalMotif in generation 10 of 10
Model Number: 841 with model SectionalMotif in generation 10 of 10
Model Number: 842 with model GLM in generation 10 of 10
Model Number: 843 with model GLM in generation 10 of 10
Template Eval Error: ValueError('NaN, inf or invalid value detected in weights,
estimation infeasible.') in model 843: GLM
Model Number: 844 with model GLM in generation 10 of 10
Template Eval Error: ValueError('NaN, inf or invalid value detected in weights,
estimation infeasible.') in model 844: GLM
Model Number: 845 with model GLM in generation 10 of 10
```

Model Number: 846 with model DatepartRegression in generation 10 of 10

```
Model Number: 847 with model DatepartRegression in generation 10 of 10
Template Eval Error: KeyError('squared_error') in model 847: DatepartRegression
Model Number: 848 with model DatepartRegression in generation 10 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
passed") in model 848: DatepartRegression
Model Number: 849 with model UnivariateMotif in generation 10 of 10
Model Number: 850 with model UnivariateMotif in generation 10 of 10
Template Eval Error: ValueError('Model UnivariateMotif returned NaN for one or
more series') in model 850: UnivariateMotif
Model Number: 851 with model UnivariateMotif in generation 10 of 10
Model Number: 852 with model UnivariateMotif in generation 10 of 10
Model Number: 853 with model AverageValueNaive in generation 10 of 10
Model Number: 854 with model AverageValueNaive in generation 10 of 10
Model Number: 855 with model AverageValueNaive in generation 10 of 10
Model Number: 856 with model Theta in generation 10 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 856: Theta
Model Number: 857 with model Theta in generation 10 of 10
Template Eval Error: TypeError('issubclass() arg 2 must be a class or tuple of
classes') in model 857: Theta
Model Number: 858 with model Theta in generation 10 of 10
Model Number: 859 with model Theta in generation 10 of 10
Model Number: 860 with model GLS in generation 10 of 10
Model Number: 861 with model GLS in generation 10 of 10
Model Number: 862 with model GLS in generation 10 of 10
Model Number: 863 with model ETS in generation 10 of 10
Model Number: 864 with model ETS in generation 10 of 10
Model Number: 865 with model ETS in generation 10 of 10
Model Number: 866 with model ETS in generation 10 of 10
Model Number: 867 with model WindowRegression in generation 10 of 10
Template Eval Error: ValueError("regression_type='User' but no future_regressor
passed") in model 867: WindowRegression
Model Number: 868 with model WindowRegression in generation 10 of 10
Model Number: 869 with model WindowRegression in generation 10 of 10
Model Number: 870 with model ZeroesNaive in generation 10 of 10
Model Number: 871 with model ZeroesNaive in generation 10 of 10
Model Number: 872 with model ZeroesNaive in generation 10 of 10
Model Number: 873 with model LastValueNaive in generation 10 of 10
Model Number: 874 with model LastValueNaive in generation 10 of 10
Model Number: 875 with model LastValueNaive in generation 10 of 10
Model Number: 876 with model Ensemble in generation 11 of 0
Model Number: 877 with model Ensemble in generation 11 of 0
Model Number: 878 with model Ensemble in generation 11 of 0
Model Number: 879 with model Ensemble in generation 11 of 0
Model Number: 880 with model Ensemble in generation 11 of 0
Validation Round: 1
Model Number: 1 of 125 with model Ensemble for Validation 1
1 - Ensemble with avg smape 2.15:
```

```
Model Number: 2 of 125 with model Ensemble for Validation 1
2 - Ensemble with avg smape 2.15:
Model Number: 3 of 125 with model Ensemble for Validation 1
3 - Ensemble with avg smape 7.71:
Model Number: 4 of 125 with model NVAR for Validation 1
4 - NVAR with avg smape 9.2:
Model Number: 5 of 125 with model NVAR for Validation 1
5 - NVAR with avg smape 6.98:
Model Number: 6 of 125 with model NVAR for Validation 1
6 - NVAR with avg smape 6.98:
Model Number: 7 of 125 with model NVAR for Validation 1
7 - NVAR with avg smape 6.98:
Model Number: 8 of 125 with model SeasonalNaive for Validation 1
8 - SeasonalNaive with avg smape 6.24:
Model Number: 9 of 125 with model MultivariateMotif for Validation 1
9 - MultivariateMotif with avg smape 2.84:
Model Number: 10 of 125 with model Ensemble for Validation 1
10 - Ensemble with avg smape 8.34:
Model Number: 11 of 125 with model SeasonalNaive for Validation 1
11 - Seasonal Naive with avg smape 12.88:
Model Number: 12 of 125 with model SeasonalNaive for Validation 1
12 - SeasonalNaive with avg smape 8.11:
Model Number: 13 of 125 with model SectionalMotif for Validation 1
13 - SectionalMotif with avg smape 6.97:
Model Number: 14 of 125 with model SectionalMotif for Validation 1
14 - SectionalMotif with avg smape 7.15:
Model Number: 15 of 125 with model SectionalMotif for Validation 1
15 - SectionalMotif with avg smape 8.7:
Model Number: 16 of 125 with model SectionalMotif for Validation 1
16 - SectionalMotif with avg smape 7.36:
Model Number: 17 of 125 with model GLM for Validation 1
17 - GLM with avg smape 8.79:
Model Number: 18 of 125 with model GLM for Validation 1
18 - GLM with avg smape 8.56:
Model Number: 19 of 125 with model GLM for Validation 1
19 - GLM with avg smape 8.61:
Model Number: 20 of 125 with model GLM for Validation 1
20 - GLM with avg smape 9.29:
Model Number: 21 of 125 with model DatepartRegression for Validation 1
21 - DatepartRegression with avg smape 8.45:
Model Number: 22 of 125 with model AverageValueNaive for Validation 1
22 - AverageValueNaive with avg smape 9.22:
Model Number: 23 of 125 with model AverageValueNaive for Validation 1
23 - AverageValueNaive with avg smape 9.22:
Model Number: 24 of 125 with model SectionalMotif for Validation 1
24 - SectionalMotif with avg smape 8.94:
Model Number: 25 of 125 with model Ensemble for Validation 1
25 - Ensemble with avg smape 8.86:
```

```
Model Number: 26 of 125 with model AverageValueNaive for Validation 1
26 - AverageValueNaive with avg smape 8.59:
Model Number: 27 of 125 with model MultivariateMotif for Validation 1
27 - MultivariateMotif with avg smape 7.46:
Model Number: 28 of 125 with model Sectional Motif for Validation 1
28 - SectionalMotif with avg smape 7.27:
Model Number: 29 of 125 with model AverageValueNaive for Validation 1
29 - AverageValueNaive with avg smape 9.17:
Model Number: 30 of 125 with model GLM for Validation 1
30 - GLM with avg smape 9.29:
Model Number: 31 of 125 with model ETS for Validation 1
31 - ETS with avg smape 9.96:
Model Number: 32 of 125 with model Theta for Validation 1
32 - Theta with avg smape 7.69:
Model Number: 33 of 125 with model WindowRegression for Validation 1
33 - WindowRegression with avg smape 9.94:
Model Number: 34 of 125 with model GLM for Validation 1
34 - GLM with avg smape 9.76:
Model Number: 35 of 125 with model WindowRegression for Validation 1
35 - WindowRegression with avg smape 9.94:
Model Number: 36 of 125 with model GLS for Validation 1
36 - GLS with avg smape 9.61:
Model Number: 37 of 125 with model ETS for Validation 1
37 - ETS with avg smape 10.11:
Model Number: 38 of 125 with model ETS for Validation 1
38 - ETS with avg smape 9.96:
Model Number: 39 of 125 with model ETS for Validation 1
39 - ETS with avg smape 9.96:
Model Number: 40 of 125 with model ETS for Validation 1
40 - ETS with avg smape 10.13:
Model Number: 41 of 125 with model UnivariateMotif for Validation 1
41 - UnivariateMotif with avg smape 7.05:
Model Number: 42 of 125 with model AverageValueNaive for Validation 1
42 - AverageValueNaive with avg smape 10.09:
Model Number: 43 of 125 with model ZeroesNaive for Validation 1
43 - ZeroesNaive with avg smape 9.85:
Model Number: 44 of 125 with model ETS for Validation 1
44 - ETS with avg smape 7.09:
Model Number: 45 of 125 with model GLS for Validation 1
45 - GLS with avg smape 9.95:
Model Number: 46 of 125 with model GLS for Validation 1
46 - GLS with avg smape 9.95:
Model Number: 47 of 125 with model GLS for Validation 1
47 - GLS with avg smape 9.95:
Model Number: 48 of 125 with model GLS for Validation 1
```

Model Number: 49 of 125 with model ZeroesNaive for Validation 1

48 - GLS with avg smape 9.99:

49 - ZeroesNaive with avg smape 10.0:

```
Model Number: 50 of 125 with model ZeroesNaive for Validation 1
50 - ZeroesNaive with avg smape 10.0:
Model Number: 51 of 125 with model ZeroesNaive for Validation 1
51 - ZeroesNaive with avg smape 9.95:
Model Number: 52 of 125 with model GLM for Validation 1
52 - GLM with avg smape 9.82:
Model Number: 53 of 125 with model GLM for Validation 1
53 - GLM with avg smape 10.08:
Model Number: 54 of 125 with model GLS for Validation 1
54 - GLS with avg smape 10.16:
Model Number: 55 of 125 with model MultivariateMotif for Validation 1
55 - MultivariateMotif with avg smape 7.49:
Model Number: 56 of 125 with model MultivariateMotif for Validation 1
56 - MultivariateMotif with avg smape 7.49:
Model Number: 57 of 125 with model MultivariateMotif for Validation 1
57 - MultivariateMotif with avg smape 7.49:
Model Number: 58 of 125 with model Theta for Validation 1
58 - Theta with avg smape 7.33:
Model Number: 59 of 125 with model ETS for Validation 1
59 - ETS with avg smape 6.32:
Model Number: 60 of 125 with model ETS for Validation 1
60 - ETS with avg smape 9.87:
Model Number: 61 of 125 with model GLS for Validation 1
61 - GLS with avg smape 9.98:
Model Number: 62 of 125 with model DatepartRegression for Validation 1
62 - DatepartRegression with avg smape 3.76:
Model Number: 63 of 125 with model SectionalMotif for Validation 1
63 - SectionalMotif with avg smape 9.15:
Model Number: 64 of 125 with model ZeroesNaive for Validation 1
64 - ZeroesNaive with avg smape 10.57:
Model Number: 65 of 125 with model GLS for Validation 1
65 - GLS with avg smape 9.52:
Model Number: 66 of 125 with model MultivariateMotif for Validation 1
66 - MultivariateMotif with avg smape 6.96:
Model Number: 67 of 125 with model MultivariateMotif for Validation 1
67 - MultivariateMotif with avg smape 6.96:
Model Number: 68 of 125 with model AverageValueNaive for Validation 1
68 - AverageValueNaive with avg smape 9.64:
Model Number: 69 of 125 with model UnivariateMotif for Validation 1
69 - UnivariateMotif with avg smape 8.1:
Model Number: 70 of 125 with model Theta for Validation 1
70 - Theta with avg smape 1.02:
Model Number: 71 of 125 with model MultivariateMotif for Validation 1
71 - MultivariateMotif with avg smape 6.96:
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Model Number: 72 of 125 with model SectionalMotif for Validation 1

Model Number: 73 of 125 with model UnivariateMotif for Validation 1

72 - SectionalMotif with avg smape 8.68:

73 - UnivariateMotif with avg smape 7.83:

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Model Number: 74 of 125 with model UnivariateMotif for Validation 1
```

74 - UnivariateMotif with avg smape 7.5:

Model Number: 75 of 125 with model SeasonalNaive for Validation 1

75 - SeasonalNaive with avg smape 2.5:

Model Number: 76 of 125 with model LastValueNaive for Validation 1

76 - LastValueNaive with avg smape 5.32:

Model Number: 77 of 125 with model UnivariateMotif for Validation 1

77 - UnivariateMotif with avg smape 7.92:

 ${\tt Model\ Number:\ 78\ of\ 125\ with\ model\ UnivariateMotif\ for\ Validation\ 1}$

78 - UnivariateMotif with avg smape 6.5:

Model Number: 79 of 125 with model UnivariateMotif for Validation 1

79 - UnivariateMotif with avg smape 7.99:

Model Number: 80 of 125 with model LastValueNaive for Validation 1

80 - LastValueNaive with avg smape 5.32:

Model Number: 81 of 125 with model LastValueNaive for Validation 1

81 - LastValueNaive with avg smape 5.32:

Model Number: 82 of 125 with model LastValueNaive for Validation 1

82 - LastValueNaive with avg smape 5.32:

Model Number: 83 of 125 with model LastValueNaive for Validation 1

83 - LastValueNaive with avg smape 5.32:

Model Number: 84 of 125 with model UnivariateMotif for Validation 1

84 - UnivariateMotif with avg smape 8.05:

Model Number: 85 of 125 with model LastValueNaive for Validation 1

85 - LastValueNaive with avg smape 8.54:

Model Number: 86 of 125 with model NVAR for Validation 1

86 - NVAR with avg smape 4.49:

Model Number: 87 of 125 with model LastValueNaive for Validation 1

87 - LastValueNaive with avg smape 5.13:

Model Number: 88 of 125 with model SeasonalNaive for Validation 1

88 - SeasonalNaive with avg smape 3.86:

Model Number: 89 of 125 with model WindowRegression for Validation 1

89 - WindowRegression with avg smape 6.22:

Model Number: 90 of 125 with model NVAR for Validation 1

90 - NVAR with avg smape 5.46:

Model Number: 91 of 125 with model LastValueNaive for Validation 1

91 - LastValueNaive with avg smape 20.46:

Model Number: 92 of 125 with model AverageValueNaive for Validation 1

92 - AverageValueNaive with avg smape 6.38:

Model Number: 93 of 125 with model NVAR for Validation 1

93 - NVAR with avg smape 5.82:

Model Number: 94 of 125 with model NVAR for Validation 1

94 - NVAR with avg smape 2.79:

Model Number: 95 of 125 with model Theta for Validation 1

95 - Theta with avg smape 8.97:

Model Number: 96 of 125 with model WindowRegression for Validation 1

96 - WindowRegression with avg smape 7.67:

Model Number: 97 of 125 with model SeasonalNaive for Validation 1

97 - SeasonalNaive with avg smape 2.17:

- Model Number: 98 of 125 with model SeasonalNaive for Validation 1
- 98 SeasonalNaive with avg smape 2.71:
- Model Number: 99 of 125 with model UnobservedComponents for Validation 1
- 99 UnobservedComponents with avg smape 0.86:
- Model Number: 100 of 125 with model AverageValueNaive for Validation 1
- 100 AverageValueNaive with avg smape 3.37:
- Model Number: 101 of 125 with model SeasonalNaive for Validation 1
- 101 SeasonalNaive with avg smape 15.09:
- Model Number: 102 of 125 with model WindowRegression for Validation 1
- 102 WindowRegression with avg smape 2.89:
- Model Number: 103 of 125 with model WindowRegression for Validation 1
- 103 WindowRegression with avg smape 2.98:
- Model Number: 104 of 125 with model DatepartRegression for Validation 1
- 104 DatepartRegression with avg smape 2.44:
- Model Number: 105 of 125 with model WindowRegression for Validation 1
- 105 WindowRegression with avg smape 0.93:
- Model Number: 106 of 125 with model WindowRegression for Validation 1
- 106 WindowRegression with avg smape 3.03:
- Model Number: 107 of 125 with model Theta for Validation 1
- 107 Theta with avg smape 0.95:
- Model Number: 108 of 125 with model UnobservedComponents for Validation 1
- 108 UnobservedComponents with avg smape 0.84:
- Model Number: 109 of 125 with model Theta for Validation 1
- 109 Theta with avg smape 0.88:
- Model Number: 110 of 125 with model Theta for Validation 1
- 110 Theta with avg smape 0.88:
- Model Number: 111 of 125 with model DatepartRegression for Validation 1
- 111 DatepartRegression with avg smape 1.62:
- Model Number: 112 of 125 with model UnobservedComponents for Validation 1
- 112 UnobservedComponents with avg smape 0.84:
- Model Number: 113 of 125 with model DatepartRegression for Validation 1
- 113 DatepartRegression with avg smape 1.9:
- Model Number: 114 of 125 with model Theta for Validation 1
- 114 Theta with avg smape 0.86:
- Model Number: 115 of 125 with model UnobservedComponents for Validation 1
- 115 UnobservedComponents with avg smape 0.84:
- Model Number: 116 of 125 with model UnobservedComponents for Validation 1
- 116 UnobservedComponents with avg smape 0.85:
- Model Number: 117 of 125 with model UnobservedComponents for Validation 1
- 117 UnobservedComponents with avg smape 1.03:
- Model Number: 118 of 125 with model UnobservedComponents for Validation 1
- 118 UnobservedComponents with avg smape 1.03:
- Model Number: 119 of 125 with model UnobservedComponents for Validation 1
- 119 UnobservedComponents with avg smape 1.03:
- Model Number: 120 of 125 with model DatepartRegression for Validation 1
- 120 DatepartRegression with avg smape 13.12:
- Model Number: 121 of 125 with model DatepartRegression for Validation 1
- 121 DatepartRegression with avg smape 1.36:

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122 - ZeroesNaive with avg smape 1.33:
Model Number: 123 of 125 with model ZeroesNaive for Validation 1
123 - ZeroesNaive with avg smape 1.33:
Model Number: 124 of 125 with model ZeroesNaive for Validation 1
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Model Number: 122 of 125 with model ZeroesNaive for Validation 1

124 - ZeroesNaive with avg smape 1.33:

Model Number: 125 of 125 with model DatepartRegression for Validation 1

125 - DatepartRegression with avg smape 1.37:

Validation Round: 2

Model Number: 1 of 125 with model Ensemble for Validation 2

1 - Ensemble with avg smape 8.42:

Model Number: 2 of 125 with model Ensemble for Validation 2

2 - Ensemble with avg smape 8.42:

Model Number: 3 of 125 with model Ensemble for Validation 2

3 - Ensemble with avg smape 9.96:

Model Number: 4 of 125 with model NVAR for Validation 2

4 - NVAR with avg smape 10.6:

Model Number: 5 of 125 with model NVAR for Validation 2

5 - NVAR with avg smape 9.64:

Model Number: 6 of 125 with model NVAR for Validation 2

6 - NVAR with avg smape 9.64:

Model Number: 7 of 125 with model NVAR for Validation 2

7 - NVAR with avg smape 9.64:

Model Number: 8 of 125 with model SeasonalNaive for Validation 2

8 - SeasonalNaive with avg smape 2.23:

Model Number: 9 of 125 with model MultivariateMotif for Validation 2

9 - MultivariateMotif with avg smape 12.27:

Model Number: 10 of 125 with model Ensemble for Validation 2

10 - Ensemble with avg smape 8.87:

Model Number: 11 of 125 with model SeasonalNaive for Validation 2

11 - SeasonalNaive with avg smape 2.73:

Model Number: 12 of 125 with model SeasonalNaive for Validation 2

12 - SeasonalNaive with avg smape 2.03:

Model Number: 13 of 125 with model SectionalMotif for Validation 2

13 - SectionalMotif with avg smape 5.57:

Model Number: 14 of 125 with model SectionalMotif for Validation 2

14 - SectionalMotif with avg smape 5.56:

Model Number: 15 of 125 with model SectionalMotif for Validation 2

15 - SectionalMotif with avg smape 9.62:

Model Number: 16 of 125 with model SectionalMotif for Validation 2

16 - SectionalMotif with avg smape 5.98:

Model Number: 17 of 125 with model GLM for Validation 2

17 - GLM with avg smape 10.35:

Model Number: 18 of 125 with model GLM for Validation 2

18 - GLM with avg smape 9.68:

Model Number: 19 of 125 with model GLM for Validation 2

19 - GLM with avg smape 9.87:

Model Number: 20 of 125 with model GLM for Validation 2

```
20 - GLM with avg smape 10.63:
```

Model Number: 21 of 125 with model DatepartRegression for Validation 2

21 - DatepartRegression with avg smape 10.06:

Model Number: 22 of 125 with model AverageValueNaive for Validation 2

22 - AverageValueNaive with avg smape 10.25:

Model Number: 23 of 125 with model AverageValueNaive for Validation 2

23 - AverageValueNaive with avg smape 10.25:

Model Number: 24 of 125 with model SectionalMotif for Validation 2

24 - SectionalMotif with avg smape 9.9:

Model Number: 25 of 125 with model Ensemble for Validation 2

25 - Ensemble with avg smape 9.15:

Model Number: 26 of 125 with model AverageValueNaive for Validation 2

26 - AverageValueNaive with avg smape 10.81:

Model Number: 27 of 125 with model MultivariateMotif for Validation 2

27 - MultivariateMotif with avg smape 6.0:

Model Number: 28 of 125 with model SectionalMotif for Validation 2

28 - SectionalMotif with avg smape 5.96:

Model Number: 29 of 125 with model AverageValueNaive for Validation 2

29 - AverageValueNaive with avg smape 10.51:

Model Number: 30 of 125 with model GLM for Validation 2

30 - GLM with avg smape 10.57:

Model Number: 31 of 125 with model ETS for Validation 2

31 - ETS with avg smape 11.05:

Model Number: 32 of 125 with model Theta for Validation 2

32 - Theta with avg smape 8.95:

Model Number: 33 of 125 with model WindowRegression for Validation 2

33 - WindowRegression with avg smape 11.13:

Model Number: 34 of 125 with model GLM for Validation 2

34 - GLM with avg smape 10.98:

Model Number: 35 of 125 with model WindowRegression for Validation 2

35 - WindowRegression with avg smape 11.13:

Model Number: 36 of 125 with model GLS for Validation 2

36 - GLS with avg smape 10.71:

Model Number: 37 of 125 with model ETS for Validation 2

37 - ETS with avg smape 11.18:

Model Number: 38 of 125 with model ETS for Validation 2

38 - ETS with avg smape 10.89:

Model Number: 39 of 125 with model ETS for Validation 2

39 - ETS with avg smape 10.89:

Model Number: 40 of 125 with model ETS for Validation 2

40 - ETS with avg smape 11.21:

Model Number: 41 of 125 with model UnivariateMotif for Validation 2

41 - UnivariateMotif with avg smape 8.1:

Model Number: 42 of 125 with model AverageValueNaive for Validation 2

42 - AverageValueNaive with avg smape 11.27:

Model Number: 43 of 125 with model ZeroesNaive for Validation 2

43 - ZeroesNaive with avg smape 10.99:

Model Number: 44 of 125 with model ETS for Validation 2

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44 - ETS with avg smape 8.08:
Model Number: 45 of 125 with model GLS for Validation 2
45 - GLS with avg smape 11.14:
Model Number: 46 of 125 with model GLS for Validation 2
46 - GLS with avg smape 11.14:
Model Number: 47 of 125 with model GLS for Validation 2
47 - GLS with avg smape 11.14:
Model Number: 48 of 125 with model GLS for Validation 2
48 - GLS with avg smape 11.16:
Model Number: 49 of 125 with model ZeroesNaive for Validation 2
49 - ZeroesNaive with avg smape 11.01:
Model Number: 50 of 125 with model ZeroesNaive for Validation 2
50 - ZeroesNaive with avg smape 11.03:
Model Number: 51 of 125 with model ZeroesNaive for Validation 2
51 - ZeroesNaive with avg smape 11.14:
Model Number: 52 of 125 with model GLM for Validation 2
52 - GLM with avg smape 10.73:
Model Number: 53 of 125 with model GLM for Validation 2
53 - GLM with avg smape 11.27:
Model Number: 54 of 125 with model GLS for Validation 2
54 - GLS with avg smape 11.3:
Model Number: 55 of 125 with model MultivariateMotif for Validation 2
55 - MultivariateMotif with avg smape 10.69:
Model Number: 56 of 125 with model MultivariateMotif for Validation 2
56 - MultivariateMotif with avg smape 10.69:
Model Number: 57 of 125 with model MultivariateMotif for Validation 2
57 - MultivariateMotif with avg smape 10.69:
Model Number: 58 of 125 with model Theta for Validation 2
58 - Theta with avg smape 9.35:
Model Number: 59 of 125 with model ETS for Validation 2
59 - ETS with avg smape 6.77:
Model Number: 60 of 125 with model ETS for Validation 2
60 - ETS with avg smape 11.03:
Model Number: 61 of 125 with model GLS for Validation 2
61 - GLS with avg smape 10.99:
Model Number: 62 of 125 with model DatepartRegression for Validation 2
62 - DatepartRegression with avg smape 4.18:
Model Number: 63 of 125 with model SectionalMotif for Validation 2
63 - SectionalMotif with avg smape 6.51:
Model Number: 64 of 125 with model ZeroesNaive for Validation 2
64 - ZeroesNaive with avg smape 11.84:
Model Number: 65 of 125 with model GLS for Validation 2
65 - GLS with avg smape 10.5:
Model Number: 66 of 125 with model MultivariateMotif for Validation 2
66 - MultivariateMotif with avg smape 8.02:
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Model Number: 67 of 125 with model MultivariateMotif for Validation 2

Model Number: 68 of 125 with model AverageValueNaive for Validation 2

67 - MultivariateMotif with avg smape 8.02:

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68 - AverageValueNaive with avg smape 11.17:
```

Model Number: 69 of 125 with model UnivariateMotif for Validation 2

69 - UnivariateMotif with avg smape 6.27:

Model Number: 70 of 125 with model Theta for Validation 2

70 - Theta with avg smape 13.44:

Model Number: 71 of 125 with model MultivariateMotif for Validation 2

71 - MultivariateMotif with avg smape 8.63:

Model Number: 72 of 125 with model SectionalMotif for Validation 2

72 - SectionalMotif with avg smape 6.13:

Model Number: 73 of 125 with model UnivariateMotif for Validation 2

73 - UnivariateMotif with avg smape 7.25:

Model Number: 74 of 125 with model UnivariateMotif for Validation 2

74 - UnivariateMotif with avg smape 6.6:

Model Number: 75 of 125 with model SeasonalNaive for Validation 2

75 - SeasonalNaive with avg smape 4.16:

Model Number: 76 of 125 with model LastValueNaive for Validation 2

76 - LastValueNaive with avg smape 8.1:

Model Number: 77 of 125 with model UnivariateMotif for Validation 2

77 - UnivariateMotif with avg smape 7.28:

Model Number: 78 of 125 with model UnivariateMotif for Validation 2

78 - UnivariateMotif with avg smape 5.29:

Model Number: 79 of 125 with model UnivariateMotif for Validation 2

79 - UnivariateMotif with avg smape 6.35:

Model Number: 80 of 125 with model LastValueNaive for Validation 2

80 - LastValueNaive with avg smape 8.1:

Model Number: 81 of 125 with model LastValueNaive for Validation 2

81 - LastValueNaive with avg smape 8.1:

Model Number: 82 of 125 with model LastValueNaive for Validation 2

82 - LastValueNaive with avg smape 8.1:

Model Number: 83 of 125 with model LastValueNaive for Validation 2

83 - LastValueNaive with avg smape 8.1:

Model Number: 84 of 125 with model UnivariateMotif for Validation 2

84 - UnivariateMotif with avg smape 7.13:

Model Number: 85 of 125 with model LastValueNaive for Validation 2

85 - LastValueNaive with avg smape 6.01:

Model Number: 86 of 125 with model NVAR for Validation 2

86 - NVAR with avg smape 8.78:

Model Number: 87 of 125 with model LastValueNaive for Validation 2

87 - LastValueNaive with avg smape 5.71:

Model Number: 88 of 125 with model SeasonalNaive for Validation 2

88 - SeasonalNaive with avg smape 2.45:

Model Number: 89 of 125 with model WindowRegression for Validation 2

89 - WindowRegression with avg smape 2.52:

Model Number: 90 of 125 with model NVAR for Validation 2

90 - NVAR with avg smape 10.61:

Model Number: 91 of 125 with model LastValueNaive for Validation 2

91 - LastValueNaive with avg smape 9.66:

Model Number: 92 of 125 with model AverageValueNaive for Validation 2

- 92 AverageValueNaive with avg smape 7.07:
- Model Number: 93 of 125 with model NVAR for Validation 2
- 93 NVAR with avg smape 9.59:
- Model Number: 94 of 125 with model NVAR for Validation 2
- 94 NVAR with avg smape 2.8:
- Model Number: 95 of 125 with model Theta for Validation 2
- 95 Theta with avg smape 10.53:
- Model Number: 96 of 125 with model WindowRegression for Validation 2
- 96 WindowRegression with avg smape 8.28:
- Model Number: 97 of 125 with model SeasonalNaive for Validation 2
- 97 SeasonalNaive with avg smape 3.16:
- Model Number: 98 of 125 with model SeasonalNaive for Validation 2
- 98 SeasonalNaive with avg smape 2.35:
- Model Number: 99 of 125 with model UnobservedComponents for Validation 2
- 99 UnobservedComponents with avg smape 4.34:
- Model Number: 100 of 125 with model AverageValueNaive for Validation 2
- 100 AverageValueNaive with avg smape 3.93:
- Model Number: 101 of 125 with model SeasonalNaive for Validation 2
- 101 SeasonalNaive with avg smape 4.22:
- Model Number: 102 of 125 with model WindowRegression for Validation 2
- 102 WindowRegression with avg smape 5.68:
- Model Number: 103 of 125 with model WindowRegression for Validation 2
- 103 WindowRegression with avg smape 6.09:
- Model Number: 104 of 125 with model DatepartRegression for Validation 2
- 104 DatepartRegression with avg smape 3.03:
- Model Number: 105 of 125 with model WindowRegression for Validation 2
- 105 WindowRegression with avg smape 1.71:
- Model Number: 106 of 125 with model WindowRegression for Validation 2
- 106 WindowRegression with avg smape 5.44:
- Model Number: 107 of 125 with model Theta for Validation 2
- 107 Theta with avg smape 1.67:
- Model Number: 108 of 125 with model UnobservedComponents for Validation 2
- 108 UnobservedComponents with avg smape 1.63:
- Model Number: 109 of 125 with model Theta for Validation 2
- 109 Theta with avg smape 1.63:
- Model Number: 110 of 125 with model Theta for Validation 2
- 110 Theta with avg smape 1.63:
- Model Number: 111 of 125 with model DatepartRegression for Validation 2
- 111 DatepartRegression with avg smape 6.7:
- Model Number: 112 of 125 with model UnobservedComponents for Validation 2
- 112 UnobservedComponents with avg smape 1.64:
- Model Number: 113 of 125 with model DatepartRegression for Validation 2
- 113 DatepartRegression with avg smape 3.16:
- Model Number: 114 of 125 with model Theta for Validation 2
- 114 Theta with avg smape 1.65:
- Model Number: 115 of 125 with model UnobservedComponents for Validation 2
- 115 UnobservedComponents with avg smape 1.64:
- Model Number: 116 of 125 with model UnobservedComponents for Validation 2

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116 - UnobservedComponents with avg smape 1.63:
     Model Number: 117 of 125 with model UnobservedComponents for Validation 2
     117 - UnobservedComponents with avg smape 1.8:
     Model Number: 118 of 125 with model UnobservedComponents for Validation 2
     118 - UnobservedComponents with avg smape 1.8:
     Model Number: 119 of 125 with model UnobservedComponents for Validation 2
     119 - UnobservedComponents with avg smape 1.79:
     Model Number: 120 of 125 with model DatepartRegression for Validation 2
     120 - DatepartRegression with avg smape 13.22:
     Model Number: 121 of 125 with model DatepartRegression for Validation 2
     121 - DatepartRegression with avg smape 2.21:
     Model Number: 122 of 125 with model ZeroesNaive for Validation 2
     122 - ZeroesNaive with avg smape 1.66:
     Model Number: 123 of 125 with model ZeroesNaive for Validation 2
     123 - ZeroesNaive with avg smape 1.66:
     Model Number: 124 of 125 with model ZeroesNaive for Validation 2
     124 - ZeroesNaive with avg smape 1.66:
     Model Number: 125 of 125 with model DatepartRegression for Validation 2
     125 - DatepartRegression with avg smape 1.82:
[14]: prediction = model.predict()
      forecast = prediction.forecast
      print("Stock Price Prediction of Apple")
      print(forecast)
     Stock Price Prediction of Apple
                      Close
     2021-04-19 134.840137
     2021-04-20 135.818553
     2021-04-21 137.039726
     2021-04-22 138.260900
     2021-04-23 139.482074
     2021-04-26 140.703248
     2021-04-27 141.924422
     2021-04-28 143.145596
     2021-04-29 144.366770
     2021-04-30 145.587944
 []:
```