A2: Predicting Car Price

In [84]:
```
#import library
import numpy as np
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt
import mlflow
import joblib
import warnings
warnings.filterwarnings('ignore')
```

Preparing data

In [85]:
```
dt = pd.read_csv("../data/Cars.csv")
```

In [86]:
```
#cleansing data (from A1 predicting car price)
Owner_map = {"First Owner": 1,"Second Owner": 2,"Third Owner": 3,"Fourth & Above Owner": 4,"Test Drive Car": 5}
dt['owner']=dt['owner'].map(Owner_map)
dt = dt[(dt['fuel'] != 'CNG') & (dt['fuel'] != 'LPG')]
dt['mileage']=dt['mileage'].str.split().str[0].astype(float)
dt['engine']=dt['engine'].str.split().str[0].astype(float)
dt['max_power']=dt['max_power'].str.split().str[0].astype(float)
dt['name']=dt['name'].str.split().str[0]
dt = dt.rename(columns={'name':'brand'})
dt=dt.drop(columns =['torque'])
dt = dt[(dt['owner'] != 5)]
dt= pd.get_dummies(dt, columns=['fuel','transmission','seller_type','owner'],drop_first=True)
X = dt.drop(columns=['selling_price','engine','seats','brand'])
y = dt['selling_price']
```

In [87]:
```
#split train and test data
from sklearn.model_selection import train_test_split

X_train, X_test, y_train, y_test = train_test_split(X, y, test_size = 0.3, random_state = 42)
```

In [88]:
```
y_train = np.log(y_train)
y_test = np.log(y_test)
```

In [89]:
```
X_train['max_power'].fillna(X_train['max_power'].median(), inplace=True)
X_train['mileage'].fillna(X_train['mileage'].median(), inplace=True)
X_test['max_power'].fillna(X_train['max_power'].median(), inplace=True)
X_test['mileage'].fillna(X_train['mileage'].median(), inplace=True)
```

In [90]:
```
X_train.isna().sum()
```

Out[90]:
```
year                            0
km_driven                       0
mileage                         0
max_power                       0
fuel_Petrol                     0
transmission_Manual             0
seller_type_Individual          0
seller_type_Trustmark Dealer    0
owner_2                         0
owner_3                         0
owner_4                         0
dtype: int64
```

In [91]:
```
from sklearn.preprocessing import StandardScaler

num_features = ['year','km_driven','mileage','max_power']


scaler = StandardScaler()
X_train = X_train.copy()
X_test  = X_test.copy()

X_train[num_features] = scaler.fit_transform(X_train[num_features])
X_test[num_features]  = scaler.transform(X_test[num_features])
```

In [92]:
```
X_train = X_train.to_numpy(dtype=float)
y_train = y_train.to_numpy(dtype=float).ravel()
X_test = X_test.to_numpy(dtype=float)
y_test = y_test.to_numpy(dtype=float).ravel()
```

Task 1. Implementation

In [12]:
```
mlflow.set_tracking_uri("http://localhost:5000")
mlflow.set_experiment(experiment_name="Car price prediction")
```

Out[12]:
```
<Experiment: artifact_location='mlflow-artifacts:/176410324244826153', creation_time=1757511172590, experiment_id='176410324244826153', last_update_time=1757511172590, lifecycle_stage='active', name='Car price prediction', tags={}>
```

In [77]:
```
from sklearn.model_selection import KFold
from sklearn.preprocessing import StandardScaler
from sklearn.preprocessing import PolynomialFeatures

class LinearRegression(object):

    kfold = KFold(n_splits=3)

    def __init__(self,
        regularization=None,
        lr=0.001,
        method='batch',
        weight_init_mode='zeros',
        use_momentum=True,
```

```
        momentum=0.9,
        degree=1, #for polynomial features
        num_epochs=500,
        batch_size=50,
        cv=kfold,):
        self.regularization = regularization
        self.lr         = lr
        self.method     = method
        self.num_epochs = num_epochs
        self.batch_size = batch_size
        self.cv         = cv
        self.weight_init_mode = weight_init_mode
        self.use_momentum   = use_momentum
        self.momentum   = momentum
        self.degree = degree
        self.prev_step = 0
#metrics
    #function mse that compute the mse score
    def mse(self, ytrue, ypred):
        ytrue = np.asarray(ytrue, dtype=float).reshape(-1)   #(m,)
        ypred = np.asarray(ypred, dtype=float).reshape(-1)
        m = ytrue.size
        if m == 0:
            raise ValueError("Empty ytrue in mse")
        else:
            return ((ypred - ytrue) ** 2).sum() / ytrue.shape[0]

    #add a function r2 that compute the r2 score
    def r2(self, ytrue, ypred):
        ss_res = np.sum((ytrue - ypred) ** 2)
        ss_tot = np.sum((ytrue - ytrue.mean()) ** 2)
        r2_score = 1.0 - (ss_res / ss_tot)
        return r2_score
#initializers
    #add a function xavier initialization method to calculated as a random number with uniform prob dist
    def xavier_init(self,n_input,n_output):
        lower,upper = -(1.0/np.sqrt(n_input)), (1.0/np.sqrt(n_input))
        numbers = np.random.rand(n_output)
        scaled =lower + numbers*(upper-lower)
        return scaled

    def fit(self, X_train, y_train):

        self.kfold_scores = list()
        #reset val loss
        self.val_loss_old = np.inf
        #cross-validation
        for fold, (train_idx, val_idx) in enumerate(self.cv.split(X_train)):


            X_cross_train = X_train[train_idx]
            y_cross_train = y_train[train_idx]
            X_cross_val   = X_train[val_idx]
            y_cross_val   = y_train[val_idx]
```

```
        if self.degree > 1:
            X_cross_train = self.polynomial_features(X_cross_train, self.degree)
            X_cross_val = self.polynomial_features(X_cross_val, self.degree)

        if self.weight_init_mode in ('zero', 'zeros'):
            self.theta = np.zeros(X_cross_train.shape[1])
        elif self.weight_init_mode in ('xavier', 'xavier_init', 'xavier_weigh_init'):
            self.theta = self.xavier_init(X_cross_train.shape[0],X_cross_train.shape[1])
        else:
            raise ValueError(f"unknown weight_init: {self.weight_init_mode}")

        #define X_cross_train as only a subset of the data
        #how big is this subset?  => mini-batch size ==> 50


        #one epoch will exhaust the WHOLE training set
        with mlflow.start_run(run_name=f"Fold-{fold}", nested=True):

            params = {"method": self.method, "lr": self.lr, "reg": type(self).__name__}
            mlflow.log_params(params=params)

            for epoch in range(self.num_epochs):

                #with replacement or no replacement
                #with replacement means just randomize
                #with no replacement means 0:50, 51:100, 101:150, ......300:323
                #shuffle your index
                perm = np.random.permutation(X_cross_train.shape[0])

                X_cross_train = X_cross_train[perm]
                y_cross_train = y_cross_train[perm]

                if self.method == 'stochastic':
                    for batch_idx in range(X_cross_train.shape[0]):
                        X_method_train = X_cross_train[batch_idx].reshape(1, -1) #(11,) ==> (1, 11) ==> (m, n)
                        y_method_train = y_cross_train[[batch_idx]]
                        train_loss = self._train(X_method_train, y_method_train)
                elif self.method == 'mini-batch':
                    for batch_idx in range(0, X_cross_train.shape[0], self.batch_size):
                        #batch_idx = 0, 50, 100, 150
                        X_method_train = X_cross_train[batch_idx:batch_idx+self.batch_size, :]
                        y_method_train = y_cross_train[batch_idx:batch_idx+self.batch_size]
                        train_loss = self._train(X_method_train, y_method_train)
                else: #batch
                    X_method_train = X_cross_train
                    y_method_train = y_cross_train
                    train_loss = self._train(X_method_train, y_method_train)

                mlflow.log_metric(key="train_loss", value=train_loss, step=epoch)

                yhat_val = self.predict(X_cross_val)
                val_loss_new = self.mse(y_cross_val, yhat_val)
                val_r2 = self.r2(y_cross_val, yhat_val)
```

```
                    mlflow.log_metric(key="val_loss", value=val_loss_new, step=epoch)
                    mlflow.log_metric(key="val_r2", value=val_r2, step=epoch)
                    #early stopping
                    if np.allclose(val_loss_new, self.val_loss_old):
                        break
                    self.val_loss_old = val_loss_new

                self.kfold_scores.append(val_loss_new)
                print(f"Fold {fold}: MSE Score - {val_loss_new}, R2 Score - {val_r2}")

    #update
    def _train(self, X, y):
        yhat = self.predict(X)
        m    = X.shape[0]

        if self.regularization is not None:
            reg_grad = self.regularization.derivation(self.theta)
        else: reg_grad = 0
        grad = (1/m) * X.T @(yhat - y) + reg_grad
        #add momentum from pseudocode
        if self.use_momentum:
            step = self.lr*grad
            self.theta = self.theta - step + self.momentum*self.prev_step
            self.prev_step = step
        else:
            self.theta = self.theta - self.lr * grad
        return self.mse(y, yhat)

    def predict(self, X, poly=False):
        if X.ndim == 1:
            X = X.reshape(1, -1)                # (1, n)
        if poly and self.degree > 1:
            X = self.polynomial_features(X, self.degree)
        return X @ self.theta

    def _coef(self):
        return self.theta[1:]  #remind that theta is (w0, w1, w2, w3, w4.....wn)
                               #w0 is the bias or the intercept
                               #w1....wn are the weights / coefficients / theta
    def _bias(self):
        return self.theta[0]

    #polynomial features
    def polynomial_features(self,X, degree):
        X_poly = np.ones((X.shape[0], 1))
        for d in range(1, degree + 1):
            X_poly = np.hstack((X_poly, X ** d))
        return X_poly
```

In [78]:
```
class LassoPenalty:

    def __init__(self, l):
        self.l = l # lambda value
```

```
    def __call__(self, theta): #__call__ allows us to call class as method
        return self.l * np.sum(np.abs(theta))

    def derivation(self, theta):
        return self.l * np.sign(theta)

class RidgePenalty:

    def __init__(self, l):
        self.l = l

    def __call__(self, theta): #__call__ allows us to call class as method
        return self.l * np.sum(np.square(theta))

    def derivation(self, theta):
        return self.l * 2 * theta

class Lasso(LinearRegression):

    def __init__(self, method, lr, l,weight_init_mode,use_momentum):
        self.regularization = LassoPenalty(l)
        super().__init__(self.regularization, lr, method,weight_init_mode,use_momentum)

class Ridge(LinearRegression):

    def __init__(self, method, lr, l,weight_init_mode,use_momentum):
        self.regularization = RidgePenalty(l)
        super().__init__(self.regularization, lr, method,weight_init_mode,use_momentum)

class Polynomial(LinearRegression):
    def __init__(self, method='batch', lr=0.001, weight_init_mode='zeros',use_momentum=True, momentum=0.9, degree=2):
        super().__init__(regularization=None,lr=lr,method=method,weight_init_mode=weight_init_mode, use_momentum=use_momentum,momentum=momentum,degree=degree)
```

Task 2 Expirement

In [35]:
```
import sys
def str_to_class(classname):
    return getattr(sys.modules[__name__], classname)
```

In [15]:
```
regs = ["Polynomial","Ridge", "Lasso","LinearRegression"] #(1) polynomial, lasso, ridge, normal
momentums=[True,False]  #(2) with or without momentum
methods =['stochastic', 'mini-batch', 'batch'] #(3) stochastic, mini-batch, batch
weights =['zeros', 'xavier'] #(4) zero, xavier
learning_rates = [0.01, 0.001, 0.0001] #(5) learning rates
best_mse = float("inf")
i=0
#for loop order (4 regs -> 3 methods -> 3 learning rates -> 2 weights -> with or without momentum)
for reg in regs:
    for lr in learning_rates:
         for method in methods:
                 for weight in weights:
                       for momentum in momentums:
```

```
                if reg == 'Polynomial':
                    params = {'method': method, 'lr': lr,'weight_init_mode':weight,'use_momentum':momentum ,'degree': 2}
                elif reg == 'Ridge': # l = lambda
                    params = {'method': method, 'lr': lr, 'l': 0.1,'weight_init_mode':weight,'use_momentum':momentum}
                elif reg == 'Lasso': # l = lambda
                    params = {'method': method, 'lr': lr, 'l': 0.1,'weight_init_mode':weight,'use_momentum':momentum}
                else: #LinearRegression
                    params = {'method': method, 'lr': lr,'weight_init_mode':weight,'use_momentum':momentum}

                mlflow.start_run(run_name=f"method-{params['method']}-lr-{params['lr']}-weight_init_mode-{params['weight_init_mode']}-use_momentum-{params['use_mo
                print("="*5, reg, "="*5)


                type_of_regression = str_to_class(reg)    #Ridge, Lasso, Polynomial, LinearRegression
                model = type_of_regression(**params)
                model.fit(X_train, y_train)

                if reg == 'Polynomial':
                     poly = True
                else:
                     poly = False

                yhat = model.predict(X_test,poly)
                mse  = model.mse(y_test, yhat)
                r2_score   = model.r2(y_test, yhat)

                print("Test MSE: ", mse)
                print("Test R2: ", r2_score)
                mlflow.log_metric(key="test_mse", value=mse)
                mlflow.log_metric(key="test_r2", value=r2_score)

                if mse < best_mse:
                    signature = mlflow.models.infer_signature(X_train, model.predict(X_train, poly))

                    logged_model = mlflow.sklearn.log_model(
                        model,
                        artifact_path=f"model",
                        signature=signature,
                        registered_model_name=f"model{i}")
                    i += 1
                    best_mse = mse

                    joblib.dump(model, f"method-{params['method']}-lr-{params['lr']}-weight_init_mode-{params['weight_init_mode']}-use_momentum-{params['use_momer

            mlflow.end_run()
```

```
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/cc58962c2bfd4cf4aa08436a46861625
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/78f3b4a28522470da3b0a79291fe7735
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/b2d92822d48b43ddba956dfe4975f6c6
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  inf
Test R2:  -inf
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/1d7003debefa46bb926c2f6bdc4d1c17
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/2285ecdfa76f41f080621f61487b989f
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/fb6ea7a461e14e789b2cb68f1ddd387a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  inf
Test R2:  -inf
🏃 View run method-stochastic-lr-0.01-weight_init_mode-zeros-use_momentum-False-reg-Polynomial at: http://localhost:5000/#/experiments/176410324244826153/runs/e9e07805b6fd4a3
e9425ba2b6ec217f3
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/f4cd4db2e71542e2b810d9ae659f7773
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/fbf920f4ec8146c0afbeb35733c2d879
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/1eb2489f80bd4f5da50140efdae32dd0
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  inf
Test R2:  -inf
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/31a755f1ab804f9fa9ebfbd9a4773da8
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/410b1a274763499983a1819f64e71d13
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/25fa05874eae42cb8bc314e7159d4313
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  inf
Test R2:  -inf
🏃 View run method-stochastic-lr-0.01-weight_init_mode-xavier-use_momentum-False-reg-Polynomial at: http://localhost:5000/#/experiments/176410324244826153/runs/a3f4013b40f243
a7a2e7c22cd29cdaf6
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
```

```
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/2f1ea5dba7934334a21f87119976467b
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/cd4c26b52abb4c54b169193b7e1845b5
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/ee676b0bea434473976aebe151a324fc
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  inf
Test R2:  -inf
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/accf7cd4bde9404e83e31fd765331e55
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/f79fe86b79cc484dbbe0af75cb398c0a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
2025/09/12 11:36:00 WARNING mlflow.models.model: `artifact_path` is deprecated. Please use `name` instead.
Fold 2: MSE Score - 3.460195803809411e+82, R2 Score - -4.9828430928783446e+82
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/30dad062d358442aa2162826259598f4
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  7.549217636066139e+79
Test R2:  -1.0729617484217485e+80
Registered model 'model0' already exists. Creating a new version of this model...
2025/09/12 11:36:02 INFO mlflow.store.model_registry.abstract_store: Waiting up to 300 seconds for model version to finish creation. Model name: model0, version 5
Created version '5' of model 'model0'.
```

```
🏃 View run method-mini-batch-lr-0.01-weight_init_mode-zeros-use_momentum-False-reg-Polynomial at: http://localhost:5000/#/experiments/176410324244826153/runs/da632699ce6548a9875c441cb3583515
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/a05454caa929414baf383d7933287469
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/b43a1b3733f04e7792bd570cad69ccf0
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/8fc7ad1ce15d46df9b2338f5dad7029c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  inf
Test R2:  -inf
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/c6494094e4d6460dae66901710398558
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/bfa44f5c45fc499b8078de2e6a6142db
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 6.44609733319662e+113, R2 Score - -9.282680343516616e+113
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/de16178f4663407c9e02439890a73b29
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  7.058350391506966e+111
Test R2:  -1.0031953431655308e+112
🏃 View run method-mini-batch-lr-0.01-weight_init_mode-xavier-use_momentum-False-reg-Polynomial at: http://localhost:5000/#/experiments/176410324244826153/runs/850a9189838c4b3d92d256d301804a75
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/09049de2c58d4c728594d17cef404a79
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/b16a25d0dd884d51aed25dc207a06ceb
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
2025/09/12 11:37:59 WARNING mlflow.models.model: `artifact_path` is deprecated. Please use `name` instead.
Fold 2: MSE Score - 14.408090944176276, R2 Score - -19.748321919734398
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/261c744bb7494dada54c818da963387d
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  15.939296934556882
Test R2:  -21.654342121241946
Registered model 'model1' already exists. Creating a new version of this model...
2025/09/12 11:38:01 INFO mlflow.store.model_registry.abstract_store: Waiting up to 300 seconds for model version to finish creation. Model name: model1, version 3
Created version '3' of model 'model1'.
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/8f5932a82df64414a15def7fabc35cc1
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/08b7096d530c45fbbf31da6aee714259
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
```

```
2025/09/12 11:39:20 WARNING mlflow.models.model: `artifact_path` is deprecated. Please use `name` instead.
Fold 2: MSE Score - 3.9942880308516795, R2 Score - -4.751960771579561
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/d0347e695ef0480f90cff9056c648cda
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  4.284207389089759
Test R2:  -5.089095416772866
Registered model 'model2' already exists. Creating a new version of this model...
2025/09/12 11:39:22 INFO mlflow.store.model_registry.abstract_store: Waiting up to 300 seconds for model version to finish creation. Model name: model2, version 3
Created version '3' of model 'model2'.
🏃 View run method-batch-lr-0.01-weight_init_mode-zeros-use_momentum-False-reg-Polynomial at: http://localhost:5000/#/experiments/176410324244826153/runs/86312a80640449c382eafd8e26b25d7d
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/398965ae1dab43d8b520167630c015e5
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/c6e432a540eb4d14908f44c11778503e
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 14.350052823948596, R2 Score - -19.664744323870675
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/4394bf52c9454143b8b3cf2a140bbdf0
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  15.882744611027631
Test R2:  -21.57396494461722
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/3c70d54d860049d6838f91d2e6595113
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/f80470eeb48d4527b18b6ff4a4db251e
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
2025/09/12 11:41:32 WARNING mlflow.models.model: `artifact_path` is deprecated. Please use `name` instead.
Fold 2: MSE Score - 3.9864162353762507, R2 Score - -4.740625019518909
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/4d4e0d396aba40718c7e9dd6ddf66a99
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  4.2761572280502405
Test R2:  -5.077653814105627
Registered model 'model3' already exists. Creating a new version of this model...
2025/09/12 11:41:35 INFO mlflow.store.model_registry.abstract_store: Waiting up to 300 seconds for model version to finish creation. Model name: model3, version 3
Created version '3' of model 'model3'.
```

```
🏃 View run method-batch-lr-0.01-weight_init_mode-xavier-use_momentum-False-reg-Polynomial at: http://localhost:5000/#/experiments/176410324244826153/runs/897557a9b05645028ec
9f68ce1ade1ab
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/d2abf5d9d18f4098ad57543f7b8c9872
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/bb5fc7577ee1432096568966a44422af
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/1ed87c993b254df99a0facdfe2e16f00
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  inf
Test R2:  -inf
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/3fb7423bc5dd4288b5f11c939dae94f3
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/46fd76e4594341ac9a016abf8ce302e4
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/8540eb37d7a9441b9f5b2cbda3eded80
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  8.288275402126922e+302
Test R2:  -1.1780031912685954e+303
🏃 View run method-stochastic-lr-0.001-weight_init_mode-zeros-use_momentum-False-reg-Polynomial at: http://localhost:5000/#/experiments/176410324244826153/runs/217f25979a1f46
2a9a85d9f39df7a132
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/7cbf282b0cc9412c945830142fc77e64
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/5f04d096732f4c74aee7c3d0699cb7ff
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/9833c2a8f4ff46e69cf38eb6525a5ec0
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  inf
Test R2:  -inf
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/95eb167b50a248789e2b4b5f5b404c6d
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/ffd56c059c9248fba57625e659d1da6a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/e97f35ac452e469ab7965e25e530785b
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  inf
Test R2:  -inf
```

```
🏃 View run method-stochastic-lr-0.001-weight_init_mode-xavier-use_momentum-False-reg-Polynomial at: http://localhost:5000/#/experiments/176410324244826153/runs/515e6d4d8dd740e99e322aca25389c9c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Polynomial =====
Fold 0: MSE Score - 4.561223788722485e+92, R2 Score - -6.643387340873878e+92
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/fc2225e6436a47c69e795589ac52d9d2
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/e75ab345b87845a9871020c10bca21a3
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 2.779426613489474e+294, R2 Score - -4.002503756562301e+294
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/5b9d3ef481474119b9e29693778e41f6
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  3.047516380053828e+294
Test R2:  -4.3314004988606814e+294
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/3150b155f96a4b06a04d90b8124d381f
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/14ed40dab3c74409a1385a1cbb443432
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/fe9758a8a94849db9d5e99261d0d55ce
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  8.189432019417234e+303
Test R2:  -1.1639546932857802e+304
🏃 View run method-mini-batch-lr-0.001-weight_init_mode-zeros-use_momentum-False-reg-Polynomial at: http://localhost:5000/#/experiments/176410324244826153/runs/033b939921854411d939ffa270fc4658d
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Polynomial =====
Fold 0: MSE Score - 4.49311898980469e+81, R2 Score - -6.544193225447684e+81
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/031045d73b71408b9fce859571c7ab6b
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/f92da5c8364e4fb8ad71b9c402c61e26
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 1.3297202935420905e+295, R2 Score - -1.9148591454974556e+295
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/0e23faa534f64e2a88fb4fd329f3a85c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  1.1979693623766097e+295
Test R2:  -1.7026602802791857e+295
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/7388af11ff454247993ecf00873efbca
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/ee2527b7e4f54068b27ee15ed2cfa23e
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/a068bdf7efd745b5b9e33a902c7d65cb
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  8.19549188734187e+303
Test R2:  -1.1648159754473327e+304
```

```
🏃 View run method-mini-batch-lr-0.001-weight_init_mode-xavier-use_momentum-False-reg-Polynomial at: http://localhost:5000/#/experiments/176410324244826153/runs/5afced026eaa4
dc0a20a6dfe31ac3d42
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Polynomial =====
Fold 0: MSE Score - 86.03268943232565, R2 Score - -124.30594997096739
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/5265ef4ffb4c405db58427e74cd953eb
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 85.92628856897801, R2 Score - -117.80186670544946
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/1ead2ed95b574118a2ed6e7a047468a0
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 92.6766837141083, R2 Score - -132.4587403427622
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/672feee75a2d4563aa8641cb68b93170
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  86.27995742655666
Test R2:  -121.62872583230053
===== Polynomial =====
Fold 0: MSE Score - 11.019043306475856, R2 Score - -15.049151763124907
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/74d8166e4fd74f0dbf3b9a90f97c3a59
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.249159964218517, R2 Score - -15.935714244827697
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/b0a9ab0489d349e8905f990cfd386c76
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 14.23776214167885, R2 Score - -19.50304051221747
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/e245cd4fe83f4714be56f896ea6b3ef3
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  15.767509937862643
Test R2:  -21.410183209398436
🏃 View run method-batch-lr-0.001-weight_init_mode-zeros-use_momentum-False-reg-Polynomial at: http://localhost:5000/#/experiments/176410324244826153/runs/4b55f1a506db48ee80b
1620b42fa02bb
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Polynomial =====
Fold 0: MSE Score - 85.86705574812993, R2 Score - -124.06470578480646
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/5e566d42481a4d11b0177239934f0690
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 85.57683546795457, R2 Score - -117.31871211540492
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/14179e4a18bd484598666c40698fd2a7
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 92.47396850132061, R2 Score - -132.16682099624762
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/b638806a07364848a43d3c44886b7091
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  86.01747110496609
Test R2:  -121.25565699771681
===== Polynomial =====
Fold 0: MSE Score - 11.019540824646189, R2 Score - -15.049876394510637
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/7c682603d2c84c8f9d18de7cf4941c50
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.238207996676609, R2 Score - -15.920572031545301
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/52437347bdbc43ad825ffd1b9ee4d519
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 14.244771583550834, R2 Score - -19.513134434930834
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/85c0f77d922644f284046b2423eb4cfc
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  15.75565506502762
Test R2:  -21.393334012968314
```

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🏃 View run method-batch-lr-0.001-weight_init_mode-xavier-use_momentum-False-reg-Polynomial at: http://localhost:5000/#/experiments/176410324244826153/runs/d956dbc4f7c0475eb78200feb009499b
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/0801daf2bd7348aeba412bc730903360
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/f0425881df6d4dde84572f191db6553f
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/1933d9a672f44530953047ff630e6cdc
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  3.0239499935550565e+302
Test R2:  -4.297905860766129e+302
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/199af469c2dc4f5582217cb541335710
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/7654e6d83ace46c1a7fc2e0a0df9654d
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/c0ae6c09d10f460bbec465a0482b33d5
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  1.2707678938813272e+304
Test R2:  -1.8061280082099174e+304
🏃 View run method-stochastic-lr-0.0001-weight_init_mode-zeros-use_momentum-False-reg-Polynomial at: http://localhost:5000/#/experiments/176410324244826153/runs/9721cf3ab90d4b9fa84e130c1dfeaa25
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/50795fedac114875b8137bf0d6dda41a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/0ce4b61708454a99b111891be85fdb13
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/907f9e3cb24543a38930c1f1281e4574
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  1.811234401052208e+303
Test R2:  -2.5742869307014492e+303
===== Polynomial =====
Fold 0: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/69a7edcf01d94a24b0c492a16a1910c4
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/c074b5fc6d224875af80977b4652ae27
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/c129f915943e46739b1dc9c89e6065f0
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  6.318497788485992e+304
Test R2:  -8.9804093104218e+304
```

```
🏃 View run method-stochastic-lr-0.0001-weight_init_mode-xavier-use_momentum-False-reg-Polynomial at: http://localhost:5000/#/experiments/176410324244826153/runs/51dbdf63645a
495db13a170be58ff3e6
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Polynomial =====
Fold 0: MSE Score - 14.014539432623707, R2 Score - -19.412068814748253
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/a79c98ccc4de4cb8a7f3e9e9c9579e6a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 15.367649139311087, R2 Score - -20.247343915697595
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/e9dacd8713d643299d314a673e1ed2cd
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 17.590070749819173, R2 Score - -24.330521019210394
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/656c426f56514781b03531673402b650
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  19.35091119216097
Test R2:  -26.503230807787926
===== Polynomial =====
Fold 0: MSE Score - 2.7780417263519166e+59, R2 Score - -4.046196392050918e+59
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/c62302a14b1e49d9bf9d8c1a06ccb5ef
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/e993028d431143c981cf8cc1377a8b90
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 4.6154142659640875, R2 Score - -5.646411474926483
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/5826d7ce6c47443994878b362871d3ae
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  5.018739645323325
Test R2:  -6.133077789403504
🏃 View run method-mini-batch-lr-0.0001-weight_init_mode-zeros-use_momentum-False-reg-Polynomial at: http://localhost:5000/#/experiments/176410324244826153/runs/c3e6b34085414
637bd9dc55ba45587c9
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Polynomial =====
Fold 0: MSE Score - 13.998884564727474, R2 Score - -19.389267620151745
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/8badee17893042e49d0518281c3d084c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 15.435000583732384, R2 Score - -20.34046416394543
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/a4cb283989864d7b8b54b2dc44c63d41
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 17.56809372404695, R2 Score - -24.298873078665938
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/deed19c8b35b4610960ad19c83ae4550
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  19.369922704608584
Test R2:  -26.53025165500589
===== Polynomial =====
Fold 0: MSE Score - 3.9286694322208095e+49, R2 Score - -5.722076789353045e+49
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/765012e9e0a1444aacd06643287048ba
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - inf, R2 Score - -inf
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/fedd03a326914b88aca6bac273f1cd19
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 6.098584664750515, R2 Score - -7.782245917884392
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/009587bcdb0345bd8561bfe984ef9854
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  6.817859246689329
Test R2:  -8.690146092586536
```

```
🏃 View run method-mini-batch-lr-0.0001-weight_init_mode-xavier-use_momentum-False-reg-Polynomial at: http://localhost:5000/#/experiments/176410324244826153/runs/360939ae4c33
4de9924cda02181b1ae7
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Polynomial =====
Fold 0: MSE Score - 157.21368634540278, R2 Score - -227.98052410002254
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/e7cba2520a1840e3b61a8a8d7c8dbcd0
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 156.5948854788187, R2 Score - -215.50841693779688
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/31c380b0ebb644fb953156263e12bbff
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 157.60619476184243, R2 Score - -225.9602599076332
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/d03a4e76624642a4815d3f42db3fb88c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  156.2697738270062
Test R2:  -221.10445881153393
===== Polynomial =====
Fold 0: MSE Score - 86.56324234380159, R2 Score - -125.07869620290579
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/7143f4d0a69546d3bbb8993842520ff0
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 85.8545853448659, R2 Score - -117.70272967747832
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/e3076803eb3a4834bb0e54e8e95b7a68
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 92.6582980716165, R2 Score - -132.43226416138614
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/2ac2b36e4f734043800343e9ea74b5a6
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  86.20099314937237
Test R2:  -121.5164947999009
🏃 View run method-batch-lr-0.0001-weight_init_mode-zeros-use_momentum-False-reg-Polynomial at: http://localhost:5000/#/experiments/176410324244826153/runs/00568e2ae013423682
0951eff8bac74e
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Polynomial =====
Fold 0: MSE Score - 157.4495992266823, R2 Score - -228.32412939580226
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/b88cc42b7124491bba2259ece8b933b7
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 156.48503171597662, R2 Score - -215.35653289500152
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/7ca6d39e8cd74d54a1a117fec520ad8c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 158.03055735654723, R2 Score - -226.57136180584743
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/ea504919a81647728ebc6df92142f958
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  156.35802182886738
Test R2:  -221.22988469662084
===== Polynomial =====
Fold 0: MSE Score - 86.95977486141163, R2 Score - -125.6562427627235
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/171b129d729e4279857eaa2fc66be799
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 85.5579897057628, R2 Score - -117.29265592509161
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/357d18bdda5f47ec896ba71e00fa9ae3
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 92.95011075753385, R2 Score - -132.85248801832415
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/9dd5c9ebb4bc42c5b03af0983b87f363
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  86.54742487232987
Test R2:  -122.00887428224279
```

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🏃 View run method-batch-lr-0.0001-weight_init_mode-xavier-use_momentum-False-reg-Polynomial at: http://localhost:5000/#/experiments/176410324244826153/runs/10cef8badd6a460b93ddb687c5486084
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Ridge =====
Fold 0: MSE Score - 14.113016641585792, R2 Score - -19.555500111629772
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/06b804b0c8db4ab583d0e86728cc6272
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.215936092266324, R2 Score - -15.889778849818349
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/d1ee9673aee14509be6b3b7e662ace30
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 12.971407927213, R2 Score - -17.679431471439585
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/425c18c060c7418eaee312e4a585ca68
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  13.054879954180631
Test R2:  -17.55475295102615
===== Ridge =====
Fold 0: MSE Score - 13.607641013645384, R2 Score - -18.819424399373208
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/e6a4f3f14cdb414d9f53a92b333109e7
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 13.429994580201711, R2 Score - -17.568338660306797
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/3f0e18031f274659ba02cdb2050e19de
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 13.631447639932995, R2 Score - -18.629919394675444
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/0b60cf84ce99490d9c8a75d1c3829bf7
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  13.746198988535864
Test R2:  -18.53731686106008
🏃 View run method-stochastic-lr-0.01-weight_init_mode-zeros-use_momentum-False-reg-Ridge at: http://localhost:5000/#/experiments/176410324244826153/runs/0a98a5ee2d6d448383f404a4f656440d
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Ridge =====
Fold 0: MSE Score - 14.111396652483748, R2 Score - -19.55314060997158
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/80edec02cc76483e99a9c27b40100166
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.272172629629262, R2 Score - -15.967531604266767
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/27e22d8fb47b45509a0095df93055e50
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 12.745486088972807, R2 Score - -17.354093503580607
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/53830c9cc4f04450b61d2b2bd51f17a1
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  12.85207518403731
Test R2:  -17.266508829249
===== Ridge =====
Fold 0: MSE Score - 14.384701693430216, R2 Score - -19.95120729850153
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/522039a4679f435f90fe5d7215439e0c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 13.110027959295403, R2 Score - -17.125952139485648
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/3a39e0b966a04c1ea36d577a55eca04d
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 13.598222946983757, R2 Score - -18.58207428961149
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/92ceabfef5f74084af73b555f4ec40ee
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  13.64368859650897
Test R2:  -18.391620002441112
```

```
🏃 View run method-stochastic-lr-0.01-weight_init_mode-xavier-use_momentum-False-reg-Ridge at: http://localhost:5000/#/experiments/176410324244826153/runs/8f4022576d954d85895
1f813d6063bcf
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Ridge =====
Fold 0: MSE Score - 14.171662432434436, R2 Score - -19.64091725460853
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/81b200237b3d4dc3803c6665a522df40
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.22422137659881, R2 Score - -15.901234101305146
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/b5fdea131ab9461d8975ab4605808114
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 12.876995946190506, R2 Score - -17.543473822162927
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/a35ffc8b9e70422da34fc624264b5fbd
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  13.005485553543904
Test R2:  -17.4845492491005
===== Ridge =====
Fold 0: MSE Score - 14.072636364175214, R2 Score - -19.49668654838526
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/abdc55700ab944e58852a6e3b0d8ab37
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.2226507376324, R2 Score - -15.899062532577606
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/f1b4424b7d154e729da5c3a100bedaa3
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 12.833279825791353, R2 Score - -17.480520573003282
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/f17be29c07214954a4273b4c8c074bfe
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  12.922236358000886
Test R2:  -17.36622811079101
🏃 View run method-mini-batch-lr-0.01-weight_init_mode-zeros-use_momentum-False-reg-Ridge at: http://localhost:5000/#/experiments/176410324244826153/runs/16befc11561e4b4badfc
8383700b191a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Ridge =====
Fold 0: MSE Score - 14.163123344118548, R2 Score - -19.628480138201166
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/7250aa7499304341884ed7b87b9c5441
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.213282361832492, R2 Score - -15.886109796557434
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/ba0aa23c3401409dad6905e6c7486c2b
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 12.936033952856835, R2 Score - -17.628491301061302
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/75ac1976ac7d4495b858d0ddfeaefd7c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  13.092792919844763
Test R2:  -17.60863821952404
===== Ridge =====
Fold 0: MSE Score - 14.09180133638207, R2 Score - -19.52460018289318
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/1004bfaf9faa40dbaba1190bf02abfb3
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.187242439143008, R2 Score - -15.850106944858645
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/e0d89d12d274446aba61eded1dcdb6b0
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 12.808747352969132, R2 Score - -17.44519266970404
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/59db3e670a3643e181c699379657ba56
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  12.905953847175912
Test R2:  -17.343085962656353
```

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🏃 View run method-mini-batch-lr-0.01-weight_init_mode-xavier-use_momentum-False-reg-Ridge at: http://localhost:5000/#/experiments/176410324244826153/runs/6729fb336113436d9b2
942a2dfa66b0e
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Ridge =====
Fold 0: MSE Score - 44.315479626453, R2 Score - -63.5451549829765
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/53339366389448658e5c23351e3da7a2
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 43.10507471229333, R2 Score - -58.5971666597402
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/f5eea2c2707941e09becd790c30e941b
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 43.24324034215473, R2 Score - -61.27227985634893
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/6bef85d4c2434305ac10c34efcc650cc
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  43.213333153036345
Test R2:  -60.41862075018229
===== Ridge =====
Fold 0: MSE Score - 14.281118434818076, R2 Score - -19.80033907960559
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/381c0ed34a1c498297abbcc5dd898ede
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.412266647403928, R2 Score - -16.161225886925518
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/351bc49f0a4f4f068e3daaffb3b3511d
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 12.965558862781911, R2 Score - -17.671008546277907
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/7e4ca0bdf8a5463893f16ca340ac7ce7
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  13.132117313533287
Test R2:  -17.664529534679776
🏃 View run method-batch-lr-0.01-weight_init_mode-zeros-use_momentum-False-reg-Ridge at: http://localhost:5000/#/experiments/176410324244826153/runs/42169cf1142845f29caccd8bb
91be2bd
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Ridge =====
Fold 0: MSE Score - 44.285890122694425, R2 Score - -63.50205809850034
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/e2cff8f6ae5844ebacda8ed5087d273a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 43.0722432636341, R2 Score - -58.55177382999836
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/bfa84a091b18460cbb7981b07b0029cc
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 43.32411288419807, R2 Score - -61.388740082987134
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/fce160de22164a6ab5b5c0f7180f7acf
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  43.29037000517846
Test R2:  -60.528112355209565
===== Ridge =====
Fold 0: MSE Score - 14.280657295230432, R2 Score - -19.799667433345544
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/8bdf6bd508c845848bb5e2a57d333abd
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.410050059372143, R2 Score - -16.158161227666064
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/a3e7c412d7bd4f728bb6cc200b501392
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 12.965859656797354, R2 Score - -17.671441703667604
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/ea4c984e224a40ac8b9ce216c564db88
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  13.131847396843492
Test R2:  -17.66414590514706
```

```
🏃 View run method-batch-lr-0.01-weight_init_mode-xavier-use_momentum-False-reg-Ridge at: http://localhost:5000/#/experiments/176410324244826153/runs/78099db576d64211a0c6c09b
4f97f9bd
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Ridge =====
Fold 0: MSE Score - 14.085205750577751, R2 Score - -19.51499376293492
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/16e4e3bcf00742dd83b636e8c72d0cb2
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.215655882978538, R2 Score - -15.889391431869644
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/6238df55232c49edb945e0b5708095a6
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 12.802756639715268, R2 Score - -17.43656576364122
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/12822eb712fd4e869c260ac96661b928
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  12.899630302834998
Test R2:  -17.33409838073815
===== Ridge =====
Fold 0: MSE Score - 14.30532565479075, R2 Score - -19.835596709174613
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/1f560b17ef4642f48cbf4b275004bbe7
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.314267448486845, R2 Score - -16.025731989063953
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/1286a1fdadd54925a60ba49d5164fe0a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 12.736361243240266, R2 Score - -17.340953300797306
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/a1face04e92d453082980e8ae89a24b2
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  12.852827282760261
Test R2:  -17.267577778641723
🏃 View run method-stochastic-lr-0.001-weight_init_mode-zeros-use_momentum-False-reg-Ridge at: http://localhost:5000/#/experiments/176410324244826153/runs/37a68029cd8748329e7
24acbde960bce
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Ridge =====
Fold 0: MSE Score - 14.101957216382386, R2 Score - -19.539392143944585
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/ab002781967e442b9357ed41f607cbc6
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.220687596736777, R2 Score - -15.896348289859926
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/4631e9a8a6514955a354128d04d23f93
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 12.797224406181833, R2 Score - -17.42859908972643
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/a275f34a36c449478381d91190d54a97
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  12.892287488527009
Test R2:  -17.323662121965324
===== Ridge =====
Fold 0: MSE Score - 14.103660742808382, R2 Score - -19.54187331707213
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/6d223b3e2862417c941b3653803611f8
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.097850584463657, R2 Score - -15.726513579184019
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/956ef308d2cd4ca9823cbf25ffa98148
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 13.160200474166635, R2 Score - -17.951301530798414
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/05171dbbf6b44468afe8961b8f633a16
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  13.25277518704203
Test R2:  -17.836019203095603
```

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🏃 View run method-stochastic-lr-0.001-weight_init_mode-xavier-use_momentum-False-reg-Ridge at: http://localhost:5000/#/experiments/176410324244826153/runs/6f7139dde2b245288b6b53a6a0a8296e
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Ridge =====
Fold 0: MSE Score - 14.782535682655267, R2 Score - -20.530649441709176
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/ab5acc074e7c4281a1fc0222140bbcbb
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.5758773869154, R2 Score - -16.387434438356415
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/75431fca8e4c40499c7e6d3bac087704
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 13.385991899347035, R2 Score - -18.276451697778178
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/6af841dcedc54712a752df6b435deac0
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  13.587061981907874
Test R2:  -18.311137236757784
===== Ridge =====
Fold 0: MSE Score - 14.123570787091403, R2 Score - -19.57087214332422
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/c46ee8999a34420cb1cc3faf3641742e
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.25740254507839, R2 Score - -15.947110454403742
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/535bc9c33a77430c8be45c8bc2fc7d50
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 12.873591489009822, R2 Score - -17.538571245283
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/0b9d5b2c6fda44a9938eb4e377f81852
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  13.004578996826622
Test R2:  -17.483260770310626
🏃 View run method-mini-batch-lr-0.001-weight_init_mode-zeros-use_momentum-False-reg-Ridge at: http://localhost:5000/#/experiments/176410324244826153/runs/e905dbde9b4b4ddeb2babfc9f25515a9
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Ridge =====
Fold 0: MSE Score - 14.491126547047006, R2 Score - -20.1062142786502
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/73ec02570e1d4e1c81b3a12c64450da5
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.747823268522783, R2 Score - -16.62516717472234
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/facc29447d484ac9a83f3e06d79f8369
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 13.353593800031367, R2 Score - -18.229796926039615
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/1946c9b58b09403da57af6c119407e8c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  13.55241225323397
Test R2:  -18.261889970017616
===== Ridge =====
Fold 0: MSE Score - 14.120897544802649, R2 Score - -19.566978586506398
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/c5a4608cd28543fa99608fd9a9fac538
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.256733595474937, R2 Score - -15.946185563279666
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/695062c9517e45f69bee6976c447099e
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 12.834240383767415, R2 Score - -17.481903821220353
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/6e286ec252894443896286f7b40e32db
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  12.944425257009206
Test R2:  -17.39776494152401
```

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🏃 View run method-mini-batch-lr-0.001-weight_init_mode-xavier-use_momentum-False-reg-Ridge at: http://localhost:5000/#/experiments/176410324244826153/runs/63fa75bd91ed42acaa
6d110469b44979
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Ridge =====
Fold 0: MSE Score - 143.76773348088832, R2 Score - -208.39659724535687
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/bfde29fbfdf44a8eaeac0d4e16e60e1c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 143.33336099560745, R2 Score - -197.17300538675826
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/8da2fb4498c34035a4c5f06d4d8deb81
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 143.47281798046816, R2 Score - -205.6075391753018
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/933cb9bb12c04ab59438f611688b967f
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  143.1924762691864
Test R2:  -202.51784397447446
===== Ridge =====
Fold 0: MSE Score - 44.3439308662278, R2 Score - -63.586593994721426
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/09c16600a8284a6bb323ce421d1f198f
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 42.82373368287274, R2 Score - -58.20818396267925
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/19b7d545dfdb4502985c44337029a323
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 42.96218402866845, R2 Score - -60.8675456766175
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/5f196a446aeb44839e784d6f5a715ef2
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  42.93281246638791
Test R2:  -60.019919876893354
🏃 View run method-batch-lr-0.001-weight_init_mode-zeros-use_momentum-False-reg-Ridge at: http://localhost:5000/#/experiments/176410324244826153/runs/bf58da7c6dff469b9c407869
2cef9092
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Ridge =====
Fold 0: MSE Score - 143.7415045143409, R2 Score - -208.358394957463
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/0afe60f1260040cb9d8b2bc6241b337c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 142.91555778059669, R2 Score - -196.59534978583036
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/6a1be33f0cf043dbb008d10b6d0a26fd
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 143.26481418827186, R2 Score - -205.30800402815873
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/a8e7e78fbb654b1996ed8e161deff576
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  142.9914668542962
Test R2:  -202.232151570775
===== Ridge =====
Fold 0: MSE Score - 44.33695775730309, R2 Score - -63.57643771524408
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/6c1cce2286034d96919e60fd0887e13e
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 42.86959900183058, R2 Score - -58.27159744881928
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/aa17bbabcce44a38bc922d554400221f
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 43.02290485144233, R2 Score - -60.95498648907661
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/354ccbf91923480c9d19250b8c092b76
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  42.98271854685271
Test R2:  -60.090850823560686
```

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🏃 View run method-batch-lr-0.001-weight_init_mode-xavier-use_momentum-False-reg-Ridge at: http://localhost:5000/#/experiments/176410324244826153/runs/242f2cd8e6ad4b5d99ef3b97aea71358
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Ridge =====
Fold 0: MSE Score - 14.224421821957456, R2 Score - -19.71776089936371
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/5fb1e8dd9a7f4a168338e4670d4c7d29
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.336579820982134, R2 Score - -16.05658112205007
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/263b6112de0d4931bfb1426afc830108
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 12.993491545506965, R2 Score - -17.71123291017918
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/285dd1b9540f46ad9898d63671c4a8ef
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  13.165821739347876
Test R2:  -17.71243325317744
===== Ridge =====
Fold 0: MSE Score - 14.142176730927957, R2 Score - -19.597971557313596
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/1fd50e2bd376433d83128c115e30ab0c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.228616137399225, R2 Score - -15.907310306800674
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/4231f343f2b94ab8a9e3895ac173c080
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 12.805619445057278, R2 Score - -17.440688336649657
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/3c561ce0bbcd405998e4ee959c1338bb
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  12.899365362422706
Test R2:  -17.333721823932258
🏃 View run method-stochastic-lr-0.0001-weight_init_mode-zeros-use_momentum-False-reg-Ridge at: http://localhost:5000/#/experiments/176410324244826153/runs/2c624966ba88427f885e592475b91e7d
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Ridge =====
Fold 0: MSE Score - 14.183333776557232, R2 Score - -19.657916477489916
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/a19d3810825e4648ba0e615cd9bab395
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.31684425752581, R2 Score - -16.029294690643074
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/f34f8c34640c43aab8ab346fb73cafa1
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 12.917901333160332, R2 Score - -17.602379484293294
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/2e412d184e6445a093cb0202eb6a3eab
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  13.068611483481908
Test R2:  -17.574269418026933
===== Ridge =====
Fold 0: MSE Score - 14.10647425409915, R2 Score - -19.545971174611747
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/df4f7acfaa854a4b983d120e2c83220d
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.203588847321758, R2 Score - -15.872707523074073
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/c4f0eddc69f74f528c7857fb99a3ec84
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 12.81060669513369, R2 Score - -17.44787020900738
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/c3cc471cfadd4116b3858e607a188f83
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  12.907410235376735
Test R2:  -17.345155910703514
```

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🏃 View run method-stochastic-lr-0.0001-weight_init_mode-xavier-use_momentum-False-reg-Ridge at: http://localhost:5000/#/experiments/176410324244826153/runs/176e700919e945349
89bbbb10d85ce97
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Ridge =====
Fold 0: MSE Score - 58.1587180532221, R2 Score - -83.70772520118864
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/e5f0eaf377de4d65b5e3867b57ba2f39
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 56.75957517239593, R2 Score - -77.47590762023671
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/d3f70c1e0c1f401597d9f4f799bb244c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 56.872725991168515, R2 Score - -80.89937389273416
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/a899a0002ccd4e33ad7ddf211d5880f9
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  56.77684034803555
Test R2:  -79.6962798352115
===== Ridge =====
Fold 0: MSE Score - 14.42999754994835, R2 Score - -20.01718036488135
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/33833e62983840f6bf8ba3a7ce8b892a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.576712544312239, R2 Score - -16.38858912872405
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/71f479e234644755a684854466999b4e
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 13.105493085896402, R2 Score - -17.872520344059897
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/c69c8f5583a342e6ba3e28301f0a9fc5
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  13.294886235192767
Test R2:  -17.895871158662263
🏃 View run method-mini-batch-lr-0.0001-weight_init_mode-zeros-use_momentum-False-reg-Ridge at: http://localhost:5000/#/experiments/176410324244826153/runs/63d39ae8cf3045fc8f
afaa47aaec50c1
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Ridge =====
Fold 0: MSE Score - 58.29853696388867, R2 Score - -83.91137036839874
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/42e08a29179f4b2491b8e809b8a26f19
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 56.79921247169599, R2 Score - -77.53071023334188
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/973f9a64b933424a997eafce1aff1540
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 56.80556917740499, R2 Score - -80.80266495353688
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/d01f6ec5d19d4c599ffc95fe58c04a77
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  56.72280664309943
Test R2:  -79.61948234265414
===== Ridge =====
Fold 0: MSE Score - 14.43109873420358, R2 Score - -20.01878423127336
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/8b0cf28ff3d54a53b6a137ca1c464c18
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 12.574226330022498, R2 Score - -16.385151683635126
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/9c45c96160b44d53bf4deb62f3936f29
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 13.106544468359793, R2 Score - -17.87403438376826
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/9736457cd2bb440c9e64ac6877f55c80
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  13.29674255356916
Test R2:  -17.898509522936262
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🏃 View run method-mini-batch-lr-0.0001-weight_init_mode-xavier-use_momentum-False-reg-Ridge at: http://localhost:5000/#/experiments/176410324244826153/runs/ffeba15811d5476790d3a27f5de46d11
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Ridge =====
Fold 0: MSE Score - 166.8515711463175, R2 Score - -242.018029130472
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/1d693c24601b4e54b4eea93dab6f4204
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 166.2093895768333, R2 Score - -228.8014504588991
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/b5614987fa6e437a80d9f40184be3452
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 166.36546324207765, R2 Score - -238.57401442330428
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/295e29865a2a4d999a9f731853102646
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  166.07553696578807
Test R2:  -235.04127884932464
===== Ridge =====
Fold 0: MSE Score - 144.1399791106378, R2 Score - -208.93877013994003
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/d8bfd6cce5914eaeb2882e7c41d39b05
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 143.33034694236423, R2 Score - -197.16883815042573
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/8ff57416c8df48639fc28cf1f59ee780
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 143.4702546369486, R2 Score - -205.6038478412631
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/fada3b54586b4bcb9bc07c4cf2513ad7
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  143.19021454217656
Test R2:  -202.51462940750355
🏃 View run method-batch-lr-0.0001-weight_init_mode-zeros-use_momentum-False-reg-Ridge at: http://localhost:5000/#/experiments/176410324244826153/runs/38c7d2afe6f8482da7410f5a5e844e98
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Ridge =====
Fold 0: MSE Score - 166.94276452382317, R2 Score - -242.15085158290037
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/a26de6ae6f174f559d48e741d2650c43
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 165.67858263033912, R2 Score - -228.067555661929
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/2237589285f0423daa01217611aa3bd7
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 166.35252764283965, R2 Score - -238.55538655801286
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/2c4e55d76e2d49b19ff2dca538e46054
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  166.061681423633
Test R2:  -235.02158612425995
===== Ridge =====
Fold 0: MSE Score - 144.16532779492414, R2 Score - -208.97569030349618
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/388272b9af404ef396e2ea0a7bbec2d5
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 143.5848047730252, R2 Score - -197.52065208052554
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/e3b750a806d64de2bcb7dfed73036f79
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 143.51237607977998, R2 Score - -205.66450468046378
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/947ad6cc11e14f96920820ed870ffeb3
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  143.24137441462008
Test R2:  -202.58734235450325
```

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🏃 View run method-batch-lr-0.0001-weight_init_mode-xavier-use_momentum-False-reg-Ridge at: http://localhost:5000/#/experiments/176410324244826153/runs/778618a92cd14c028216f4cf04833279
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Lasso =====
Fold 0: MSE Score - 11.61873075793637, R2 Score - -15.922591920427415
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/a80cf477ef0e4553a4f90fc8cad98301
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.865948527383186, R2 Score - -12.640681116258099
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/61a3019147b3477f955038d6737eb46d
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.44240999289209, R2 Score - -14.037556674914734
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/408ca3e14b0d40c9b0bb1eca10cf4df8
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.165793492038489
Test R2:  -13.448527099287467
===== Lasso =====
Fold 0: MSE Score - 11.837969484463226, R2 Score - -16.241911438149597
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/6654688f384540d787975f2e91d75821
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 10.276299408711992, R2 Score - -13.208033105014762
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/5d27d0887b73455995a27e3cc8a565c9
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.533147512257427, R2 Score - -14.168222928291703
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/9aa49acf57d6432d8da587870150b025
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.210215689815513
Test R2:  -13.511663865629801
🏃 View run method-stochastic-lr-0.01-weight_init_mode-zeros-use_momentum-False-reg-Lasso at: http://localhost:5000/#/experiments/176410324244826153/runs/0a6c32cc7e5c4e23a511ae464afdbe03
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Lasso =====
Fold 0: MSE Score - 11.58341666269856, R2 Score - -15.871157212523507
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/69f548104ef44ae08aa83ba274c4d588
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.857426633889386, R2 Score - -12.628898728448858
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/cbb67e6a5601479593b0f11aaa25ec91
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.49195680355924, R2 Score - -14.108906389585552
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/80712ad46f2442fd8d3ce9bbe6ed69ab
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.217400677748268
Test R2:  -13.521875807563873
===== Lasso =====
Fold 0: MSE Score - 11.831160474110451, R2 Score - -16.231994166979227
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/814a77abf5ac4e3e90cfe7bf7a706b60
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.939092426885747, R2 Score - -12.741810025044197
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/f93c26b8cd144e3589da157924ae08d5
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 11.10821287153746, R2 Score - -14.9963438254639
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/885c85a43c4e42c8ad3100bcf7c82fe8
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.656105095225593
Test R2:  -14.145401425063625
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🏃 View run method-stochastic-lr-0.01-weight_init_mode-xavier-use_momentum-False-reg-Lasso at: http://localhost:5000/#/experiments/176410324244826153/runs/05d100793179430d9042974e379659b4
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Lasso =====
Fold 0: MSE Score - 12.334510681225144, R2 Score - -16.96511986939265
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/96fb4137cc3b41baa7e95eadf4829bea
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 10.32503352801323, R2 Score - -13.275413000523521
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/7d9c574d1c1c492294fda8143c907bd2
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.788733405113659, R2 Score - -14.536278516202
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/852ec1ffbc844f5da627fa8a7a773488
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.83209822716331
Test R2:  -14.395538469268
===== Lasso =====
Fold 0: MSE Score - 11.66090122550106, R2 Score - -15.98401288185243
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/cfad59a18eca42c99588dbef45ba9fb8
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.88329052088129, R2 Score - -12.664658192823145
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/85349aa4fc6c47bb8654cdeac9c80b26
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.52167594581419, R2 Score - -14.151703338402237
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/74d0d16902a049dfa10c6eaab49542f2
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.27886874667563
Test R2:  -13.60923967742149
🏃 View run method-mini-batch-lr-0.01-weight_init_mode-zeros-use_momentum-False-reg-Lasso at: http://localhost:5000/#/experiments/176410324244826153/runs/138a2b4c4fe143ec98af5130fcdb5d16
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Lasso =====
Fold 0: MSE Score - 12.177828251149972, R2 Score - -16.73691311596118
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/1de31495e57e4be692b8d2c85c138517
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 10.129530753587481, R2 Score - -13.005110454763868
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/112bcef4266a4de897e3fc3cf99bfb89
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 11.058503547245593, R2 Score - -14.924760083605506
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/2b96f0f1f74c4f31ac71343d5bcd4f91
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  11.261199520035493
Test R2:  -15.00541527458168
===== Lasso =====
Fold 0: MSE Score - 11.689929073098243, R2 Score - -16.02629171845254
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/5747bbe2765d42e1bb24359f3cbbbedd
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.917126846504123, R2 Score - -12.711440367561428
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/e5bebbca67454aa080daaf25f8d663b4
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.579041511253246, R2 Score - -14.234312424050618
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/f763f021749247afa5a97a0c0cfe01aa
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.393411123153838
Test R2:  -13.772037459203926
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🏃 View run method-mini-batch-lr-0.01-weight_init_mode-xavier-use_momentum-False-reg-Lasso at: http://localhost:5000/#/experiments/176410324244826153/runs/e09332ef2ed34f73ac6
0138e736eec10
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Lasso =====
Fold 0: MSE Score - 42.17213477260757, R2 Score - -60.423389700516644
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/a082050a9e734b868b0ac2aab058cbba
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 40.95548966991787, R2 Score - -55.625145873909176
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/b70f368fa9814b3b919dc752bdc665f6
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 41.08320851678587, R2 Score - -58.16173343883485
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/2f6ad4853e7e46c6969ef862d01579d6
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  41.07998301325728
Test R2:  -57.38651436999596
===== Lasso =====
Fold 0: MSE Score - 12.38775667200658, R2 Score - -17.042672245135382
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/cb358d47bc3f48c8bea2d1f2d31cecf0
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 10.438570574265611, R2 Score - -13.432389558683344
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/24414b474a684785bb7ae816d1d20bf2
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 11.023371253709028, R2 Score - -14.87416794486211
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/307b7dbe59f246e38c1fcecd6fa608fa
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  11.216489339998079
Test R2:  -14.941869202315846
🏃 View run method-batch-lr-0.01-weight_init_mode-zeros-use_momentum-False-reg-Lasso at: http://localhost:5000/#/experiments/176410324244826153/runs/a503fc9c9a334ea89677d3183
291d37e
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Lasso =====
Fold 0: MSE Score - 42.21663104865622, R2 Score - -60.488198184096966
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/f364edac696a473790005ca9b6344df6
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 40.9965158067574, R2 Score - -55.6818686967079
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/37a144dc9a2d48498c074ff05f38a1ba
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 41.04538880119657, R2 Score - -58.107271287186876
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/03d91342b3774b8b8a0f7923d47a7e52
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  41.040224778592005
Test R2:  -57.33000644157592
===== Lasso =====
Fold 0: MSE Score - 12.388418789003106, R2 Score - -17.043636613444555
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/606d1afd4cd64113a6c40ab2b381e69c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 10.437329431812978, R2 Score - -13.430673552526487
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/4a9b0a3636ca44ff9422b4538deae214
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 11.020891096880042, R2 Score - -14.870596403531716
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/281a77f972424eafaf70955153735d53
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  11.211959224393233
Test R2:  -14.935430600338462
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🏃 View run method-batch-lr-0.01-weight_init_mode-xavier-use_momentum-False-reg-Lasso at: http://localhost:5000/#/experiments/176410324244826153/runs/ff6eb50fce4941b3a19d3a9133d667c6
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Lasso =====
Fold 0: MSE Score - 11.837767656734142, R2 Score - -16.241617477615637
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/246a3c2753844306a107ddb24c0ac237
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.968094722818035, R2 Score - -12.781908660198605
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/e9eaedba42d34b27b97d51f0759a431c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.546713788257641, R2 Score - -14.187758997490251
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/7230cc6b4c3948f796bcd54a54df49de
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.341856235236849
Test R2:  -13.698763081187815
===== Lasso =====
Fold 0: MSE Score - 11.608145643447498, R2 Score - -15.90717478264721
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/a41bbe54f1c94e86b5f1ab5149704730
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.881780660177608, R2 Score - -12.662570656249065
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/e4bf6b9b441c4cfbb7c5d391eef7972e
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.413007371765055, R2 Score - -13.995215531262089
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/22a21d149cdf46c8a69a814c6e950d77
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.13536470568535
Test R2:  -13.405279010039337
🏃 View run method-stochastic-lr-0.001-weight_init_mode-zeros-use_momentum-False-reg-Lasso at: http://localhost:5000/#/experiments/176410324244826153/runs/8d9bdd55612d4caf9cfae360c30b884c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Lasso =====
Fold 0: MSE Score - 11.846147953271034, R2 Score - -16.253823315019105
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/85b22f52bada468485700b39d349aa65
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.95351103260675, R2 Score - -12.761745219540233
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/beac05929d6844028c35513d79ed378d
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.575804996907761, R2 Score - -14.22965169267419
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/79582f521543447595ea1cc6d9d9bb91
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.40674655060944
Test R2:  -13.790990951139774
===== Lasso =====
Fold 0: MSE Score - 11.559862198261303, R2 Score - -15.836850316367606
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/e349fdf3540b446b9096d266f80ab28a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.869082893613747, R2 Score - -12.645014697579144
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/6d105d03945545b684592849c22d91d2
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.460583997857796, R2 Score - -14.063728088397637
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/d56e2daaaa6e476bab5f5e84f33f6169
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.175355235688693
Test R2:  -13.462117097191184
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🏃 View run method-stochastic-lr-0.001-weight_init_mode-xavier-use_momentum-False-reg-Lasso at: http://localhost:5000/#/experiments/176410324244826153/runs/ca67e0fee05f4ddeb9705b3ca9e15302
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Lasso =====
Fold 0: MSE Score - 12.54863737399262, R2 Score - -17.276993749291243
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/3de4ef61dcfe4661a456139dd457e310
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 10.600199924999313, R2 Score - -13.655858637836449
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/3e57f0e211754463a0f09fec8a9e2772
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 11.178388765266961, R2 Score - -15.097400380405567
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/6ce753af6d7b4299bcc4287dea7dff73
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE: 11.411596994991259
Test R2: -15.219173501547889
===== Lasso =====
Fold 0: MSE Score - 11.757259080032965, R2 Score - -16.124357355318903
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/e9807ca3826e4cbb956398ab70e83470
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.945498811450863, R2 Score - -12.750667505773832
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/a4625fe6dfae4ddc85c7cfe44ffa6616
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.529570587035435, R2 Score - -14.163071989400752
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/97b8dcbcccec4742b304368aef021a22
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE: 10.303257790890617
Test R2: -13.643903549606375
🏃 View run method-mini-batch-lr-0.001-weight_init_mode-zeros-use_momentum-False-reg-Lasso at: http://localhost:5000/#/experiments/176410324244826153/runs/37b36ff8dd1b4a22b59c7fb86fd2b709
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Lasso =====
Fold 0: MSE Score - 12.551606006202709, R2 Score - -17.281317539255898
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/af9c8fbd79fe4fee9dae5eda582d6c20
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 10.599856588357362, R2 Score - -13.65538393987554
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/c856998da34941e48d10d046a852bcad
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 11.17661227141386, R2 Score - -15.09484214652883
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/afb26b9d11634cb2b7163b39e7e75ee2
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE: 11.409246852935734
Test R2: -15.215833271274374
===== Lasso =====
Fold 0: MSE Score - 11.769789899910363, R2 Score - -16.142608398021544
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/31ea337cf0814e63a1fdac266c2dd696
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.951161364170108, R2 Score - -12.758496563034047
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/a6dbc4557b5e49ab8e49b74d763264ba
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.527414147731523, R2 Score - -14.159966616381432
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/056420e02cd34604bfaf388665eb211a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE: 10.299770102343105
Test R2: -13.638946537393597

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🏃 View run method-mini-batch-lr-0.001-weight_init_mode-xavier-use_momentum-False-reg-Lasso at: http://localhost:5000/#/experiments/176410324244826153/runs/2de6ceecba354fea9d
bfc9a32c4d1568
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Lasso =====
Fold 0: MSE Score - 143.94118303922153, R2 Score - -208.64922519204086
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/9c0d589c268242fc83f57968e6243c2f
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 143.50899979549004, R2 Score - -197.41584395967308
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/03f16bff6d714443a8890ec00ffc37df
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 143.64564641896374, R2 Score - -205.85642017505984
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/49164d5ca53a443a84e736556fc9527a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  143.3680500723964
Test R2:  -202.76738503150963
===== Lasso =====
Fold 0: MSE Score - 42.284092215627616, R2 Score - -60.58645485454722
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/ac10022a08474b698a4ed1ba7dd1746d
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 40.71529402439785, R2 Score - -55.29305087088352
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/ffbce7f0e32a45be981ec13bf64fef36
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 40.84237969767494, R2 Score - -57.81492872432945
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/1d52252db65d45f2950df5b4cc09e357
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  40.83915251590313
Test R2:  -57.04422471301233
🏃 View run method-batch-lr-0.001-weight_init_mode-zeros-use_momentum-False-reg-Lasso at: http://localhost:5000/#/experiments/176410324244826153/runs/c19e52a0db0f4ab6a1153aee
145fa977
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Lasso =====
Fold 0: MSE Score - 144.33108259754246, R2 Score - -209.21711089770736
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/ba85200fe85548cb9a01cc7747d829ed
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 143.91305746901932, R2 Score - -197.97449494613343
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/a8e834d07661425ea3bad12c66f81d8f
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 143.38975260473728, R2 Score - -205.48792116603707
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/73b7d36d5c984a8abc1b878fd7696b7e
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  143.11285433076154
Test R2:  -202.40467821560574
===== Lasso =====
Fold 0: MSE Score - 42.21846579914656, R2 Score - -60.49087048406421
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/bf6b52feb8474016bc0b9aa306db6380
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 40.63344695542342, R2 Score - -55.17988894174089
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/ab27024cdde74eeba0d99cbf4ff0fdec
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 40.80294281365105, R2 Score - -57.758137774826885
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/f75f6ca44fd34c11b5fb16a158057fe5
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  40.79009815095938
Test R2:  -56.97450429996409
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🏃 View run method-batch-lr-0.001-weight_init_mode-xavier-use_momentum-False-reg-Lasso at: http://localhost:5000/#/experiments/176410324244826153/runs/174ba3815894460f866b969
d8248687c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Lasso =====
Fold 0: MSE Score - 11.921479321836069, R2 Score - -16.36354287351413
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/076349e734f54fd686ec32c6ede5f123
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 10.12006473347758, R2 Score - -12.992022715516002
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/c00eb2e09c43478b97b697a6607309fd
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.662284264932474, R2 Score - -14.354185865821188
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/d7197d64d93449479c45121b3e886290
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.59315719464384
Test R2:  -14.055934287243934
===== Lasso =====
Fold 0: MSE Score - 11.660649020141037, R2 Score - -15.983645546686763
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/4a809cdfc9734bb9ae65ac5894380195
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 10.05635546758586, R2 Score - -12.903938150938373
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/bd5b59b8fe6845efa23deb9a1f211ad3
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.525296638240397, R2 Score - -14.15691730410542
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/35b3757a76e74fe4a692e48b7b47869b
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.297314107240034
Test R2:  -13.635455859383049
🏃 View run method-stochastic-lr-0.0001-weight_init_mode-zeros-use_momentum-False-reg-Lasso at: http://localhost:5000/#/experiments/176410324244826153/runs/1d67ffd1a7ab46e898
9fa29186701047
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Lasso =====
Fold 0: MSE Score - 11.984650102281343, R2 Score - -16.455550629011874
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/36a897f82a824c6397d9d350ac1d4c10
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 10.115038668265056, R2 Score - -12.985073667216867
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/ff2e873290af41d2bd43135e27c320be
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.664653904215266, R2 Score - -14.35759825673845
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/c60968a043fd4571b056bf0f0ed5aa85
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.599361391155885
Test R2:  -14.064752241445323
===== Lasso =====
Fold 0: MSE Score - 11.804427491579998, R2 Score - -16.193057783685404
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/f07d800bee284a45b4a23d597fbecd1e
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.954386722411098, R2 Score - -12.762955950099458
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/7d25f68093ed4b2eb9ddc28d609e3316
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.534952992337741, R2 Score - -14.170822903685469
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/4ea91ba204c049a987bec7d7f66b6b32
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.315854413068095
Test R2:  -13.661806985971998
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🏃 View run method-stochastic-lr-0.0001-weight_init_mode-xavier-use_momentum-False-reg-Lasso at: http://localhost:5000/#/experiments/176410324244826153/runs/8c7098a5ba754f768b886d98c914ede4
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Lasso =====
Fold 0: MSE Score - 56.700426554570775, R2 Score - -81.58373485776423
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/faafcbf4b84145ae89d8b2508e0af5ba
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 55.26635258761092, R2 Score - -75.4113749442235
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/e62685d4af6246518d3d5adfe1b6b1bb
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 55.36649215734805, R2 Score - -78.73032702930256
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/81e6ba6c58ba4ce7970db5bf56e8e49d
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  55.28991780699174
Test R2:  -77.58293367628761
===== Lasso =====
Fold 0: MSE Score - 12.54895801799109, R2 Score - -17.277460764807042
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/584d8e1972d84e9fa9403d14f4e579c8
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 10.60027235295591, R2 Score - -13.655958776881073
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/34d74dfd61fc4eb28e3b175d69783485
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 11.178126039517958, R2 Score - -15.097022043092316
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/7bdd2eead8a9481b9ec182b34cf118b2
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  11.411385186737906
Test R2:  -15.218872460877446
🏃 View run method-mini-batch-lr-0.0001-weight_init_mode-zeros-use_momentum-False-reg-Lasso at: http://localhost:5000/#/experiments/176410324244826153/runs/0785b4f278a24965bc80a3e698a4952f
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Lasso =====
Fold 0: MSE Score - 56.58608633917334, R2 Score - -81.417199214106
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/073efa6ce9244f5691abc1c58c1a4869
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 55.14749046201977, R2 Score - -75.24703592020676
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/58b7de696247467abda6053a8479c54b
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 55.334988693951935, R2 Score - -78.68496057494983
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/c723a8cd78cf4b2cb9702d927ded150f
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  55.2561062509043
Test R2:  -77.53487769474707
===== Lasso =====
Fold 0: MSE Score - 12.547308810282175, R2 Score - -17.275058706472837
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/1cf6cce530894941a31774b06297f797
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 10.599781723588388, R2 Score - -13.655280431689015
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/781cec527d484eb986e2f7f41a9b9849
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 11.17785215216555, R2 Score - -15.096627632550383
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/9abfe89352ac4e599ce0fd4d00a6669e
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  11.412072969431442
Test R2:  -15.219849998626344
```

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🏃 View run method-mini-batch-lr-0.0001-weight_init_mode-xavier-use_momentum-False-reg-Lasso at: http://localhost:5000/#/experiments/176410324244826153/runs/ca1d7c6a5cc248d0992955e06cc0cf5e
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Lasso =====
Fold 0: MSE Score - 166.8836358156187, R2 Score - -242.06473107450984
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/eaa54f75c634443a8e7388493e4e3ed7
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 166.24107272667624, R2 Score - -228.84525564829036
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/11f94d2cca094ea0a3239a8d8d39d463
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 166.39686100500072, R2 Score - -238.61922866405357
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/44eff5e9c3094bf0be4a4566dc53c774
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  166.10723901089963
Test R2:  -235.08633660681855
===== Lasso =====
Fold 0: MSE Score - 144.31675368158213, R2 Score - -209.19624094189973
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/6f9f2a1450f14db1ab8b311fdc5aedb1
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 143.50632863895837, R2 Score - -197.41215081305276
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/76ef09950b5743569150fdc9ed303814
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 143.6435344548839, R2 Score - -205.85337884843432
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/afe473550b554aeb83945108eb98f496
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  143.36620268783295
Test R2:  -202.7647593647628
🏃 View run method-batch-lr-0.0001-weight_init_mode-zeros-use_momentum-False-reg-Lasso at: http://localhost:5000/#/experiments/176410324244826153/runs/81aa4fd4ddb44725aad5ec6733e34bef
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== Lasso =====
Fold 0: MSE Score - 167.12182022142292, R2 Score - -242.41164482827602
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/4c25414497f64f9d9fc9a043c383e4d5
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 165.38997299678476, R2 Score - -227.66852337755526
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/d02141ee4bfa4de7a580c3d299b7478f
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 166.75302919537097, R2 Score - -239.1321274443294
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/e8fa47be494b4941bd638bab6820d4e8
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  166.48146935738436
Test R2:  -235.61822595778702
===== Lasso =====
Fold 0: MSE Score - 144.47873248761366, R2 Score - -209.43216182614586
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/ec7cfe29cf7846e7963870752a44d6a2
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 143.41349013921092, R2 Score - -197.28379210868164
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/29050eca7a304c50a14510bb1b6a510b
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 143.45211005264173, R2 Score - -205.57771879489903
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/81e1746e15444af3b8f79eba7b8b9a2a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  143.18007354406268
Test R2:  -202.50021612179427
```

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🏃 View run method-batch-lr-0.0001-weight_init_mode-xavier-use_momentum-False-reg-Lasso at: http://localhost:5000/#/experiments/176410324244826153/runs/d2eb63cadd9d4a03b89c72
bed6cb5104
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== LinearRegression =====
Fold 0: MSE Score - 10.952523012482237, R2 Score - -14.952265466924958
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/f4e1dec66a5d47d9a7d134006a13c602
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.17763738441403, R2 Score - -11.689020687060653
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/724d7c1b162f4cdebd72494e92d8fe97
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.1900121278751, R2 Score - -13.674091995553939
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/3df450ad67e640309c537b329a20930a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  9.91802471813955
Test R2:  -13.096376148469936
===== LinearRegression =====
Fold 0: MSE Score - 11.337163012002877, R2 Score - -15.512490665681288
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/df53a7d7960049c6a75a4f77fb2b125a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.535916674663678, R2 Score - -12.184378384831957
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/052617ed777548549b8bd2d31aacf654
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 11.287450970417398, R2 Score - -15.254455034662318
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/ffcd15db8fca4a02829e93c49d1e67dc
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.82689183695643
Test R2:  -14.388138685861765
🏃 View run method-stochastic-lr-0.01-weight_init_mode-zeros-use_momentum-False-reg-LinearRegression at: http://localhost:5000/#/experiments/176410324244826153/runs/00f139999
f494391a2c91114e42911a2
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== LinearRegression =====
Fold 0: MSE Score - 11.224612168998837, R2 Score - -15.348561229141374
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/10cdc3745d5843919d1a7729ee83d332
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.198256203894616, R2 Score - -11.71752831009839
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/234013fb6e7a45c2924ce46123ed8eb3
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.215032867538964, R2 Score - -13.710123025842902
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/9de7d2f258d8413eae92a2c1502ce47a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  9.901362793921736
Test R2:  -13.072694744379255
===== LinearRegression =====
Fold 0: MSE Score - 11.07328170234459, R2 Score - -15.128149569238815
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/8dad7b7b26ba40d389d3b41395ef2103
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.42953663937559, R2 Score - -12.037297125034836
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/956cbae1cce74e0ebe0289993d27f552
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.401893983615686, R2 Score - -13.979211734795545
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/3b9b3dd19b2b43efb3d8ad055630603d
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.091115990855071
Test R2:  -13.342388813043438
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🏃 View run method-stochastic-lr-0.01-weight_init_mode-xavier-use_momentum-False-reg-LinearRegression at: http://localhost:5000/#/experiments/176410324244826153/runs/de8ae99d
106544ec9a9f6cd2c5695aec
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== LinearRegression =====
Fold 0: MSE Score - 11.47552746314248, R2 Score - -15.714017423785226
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/cb624234278148b1bc7538888521d8f4
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.51118036867774, R2 Score - -12.150177916320304
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/4ce18b2e33394730b6c088e2d0a7e587
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.402123896692265, R2 Score - -13.979542820332476
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/cafb1c53e43a4de79ab8e41468149e83
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.218679767446432
Test R2:  -13.523693763258212
===== LinearRegression =====
Fold 0: MSE Score - 10.96042562081869, R2 Score - -14.963775555141211
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/9153c9121b08453aa4304f42d184f339
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.164548539756735, R2 Score - -11.670924022998921
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/bda66996739d47d78fd8780a19b01f1c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.26077881962055, R2 Score - -13.77599932715103
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/c2d6cd6d038241bca3ae1cbdab83fb3c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  9.96190309622352
Test R2:  -13.158739990044676
🏃 View run method-mini-batch-lr-0.01-weight_init_mode-zeros-use_momentum-False-reg-LinearRegression at: http://localhost:5000/#/experiments/176410324244826153/runs/922d45617
2504474b91e14c126535103
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== LinearRegression =====
Fold 0: MSE Score - 11.425101935459871, R2 Score - -15.640573030837043
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/c9c3ef1d3d91439399f1d844e32edc74
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.575285930214324, R2 Score - -12.23881040008729
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/88fa04510ee74940896dfbe97fd414bf
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 11.054066555126488, R2 Score - -14.918370608330871
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/001beb009bdf46969ef1c92a02b53f38
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  11.230864983015117
Test R2:  -14.962301140842241
===== LinearRegression =====
Fold 0: MSE Score - 11.038061880412284, R2 Score - -15.076852169678766
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/ff87481ea5c24fefa9b9dda0d1cbf929
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.242238808413735, R2 Score - -11.778338751308642
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/432a88e2bd444428b56c1dfb99806ed8
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.208668697766322, R2 Score - -13.70095832500181
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/3261054c2edf4b0cb210aec18485fb7d
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  9.865327110712311
Test R2:  -13.021477636162324
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🏃 View run method-mini-batch-lr-0.01-weight_init_mode-xavier-use_momentum-False-reg-LinearRegression at: http://localhost:5000/#/experiments/176410324244826153/runs/a8d4467a
e1ac4c3196789684dd38d8ea
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== LinearRegression =====
Fold 0: MSE Score - 41.087696901327504, R2 Score - -58.843914287834906
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/0338537557fa432abd127eb7f139a20e
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 39.898203724694675, R2 Score - -54.16334010962182
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/d51d4c85265c406e956d3bd41e6757c4
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 40.04668731482507, R2 Score - -56.66909463899403
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/77321727676241ad97c4920e8d7174d3
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  40.03068343073917
Test R2:  -55.895156763218154
===== LinearRegression =====
Fold 0: MSE Score - 12.117245316210964, R2 Score - -16.64867453752486
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/344087a2421c410fb1cba0ff8b1c731f
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 10.156113381454446, R2 Score - -13.041863651778732
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/b11f6a8a378c4e1f9d6328e0a92ac197
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.913525898227052, R2 Score - -14.715985517657977
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/a2a8fcffc8604b078592de3cf9f14c2a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  11.05190891058317
Test R2:  -14.707952902887179
🏃 View run method-batch-lr-0.01-weight_init_mode-zeros-use_momentum-False-reg-LinearRegression at: http://localhost:5000/#/experiments/176410324244826153/runs/40af961a58c944
1284f4c02e69db0945
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== LinearRegression =====
Fold 0: MSE Score - 41.17554585759205, R2 Score - -58.97186561646733
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/2dd646ceace5499bad637780da742272
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 39.83415570096688, R2 Score - -54.07478717774989
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/e081d306834642889b153a4b86760420
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 39.99117716428856, R2 Score - -56.589157437208804
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/65a312b5c1ba48af8988b681647a9218
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  39.9649660050076
Test R2:  -55.80175333068515
===== LinearRegression =====
Fold 0: MSE Score - 12.113176563601359, R2 Score - -16.642748430665858
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/880ca3d3f5f54cf184c8864659f6e67f
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 10.154386521212041, R2 Score - -13.039476091187511
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/6dc9c35f04d6423588ff44af50032527
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.918134492875708, R2 Score - -14.722622108566402
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/beca9ec4195d4d4c8dd0a4ac7ef8b031
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  11.058682794491995
Test R2:  -14.717580547330353
```

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🏃 View run method-batch-lr-0.01-weight_init_mode-xavier-use_momentum-False-reg-LinearRegression at: http://localhost:5000/#/experiments/176410324244826153/runs/e5e76404fc944
f01bafc5f8491d1be42
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== LinearRegression =====
Fold 0: MSE Score - 11.098276252387462, R2 Score - -15.164553938995066
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/c262cb8f564049a6b3c5d01a2b629265
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.240053409231713, R2 Score - -11.775317213818258
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/42eee405ed7a4e19ab854adcc1e917c0
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.244364301682236, R2 Score - -13.752361656923869
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/d8236394e3154bbca5fd232fc01de91b
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  9.927593078506355
Test R2:  -13.10997555063798
===== LinearRegression =====
Fold 0: MSE Score - 10.954282255870664, R2 Score - -14.954827791379437
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/6b9f5c0dcbbd4c6887753bbc6567ec99
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.160847102918407, R2 Score - -11.66580640866681
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/51123c1c29dd4013b482e23180efa630
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.16862254702364, R2 Score - -13.643290003051689
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/62d304a9a38a40509116fd94c77884dd
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  9.892825494556545
Test R2:  -13.060560777529615
🏃 View run method-stochastic-lr-0.001-weight_init_mode-zeros-use_momentum-False-reg-LinearRegression at: http://localhost:5000/#/experiments/176410324244826153/runs/97fa7d05
7f304007af8f8cd17c3a980c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== LinearRegression =====
Fold 0: MSE Score - 11.07245395388723, R2 Score - -15.12694395998179
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/c3d35f9689ae44b8b12844786620722d
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.216046418513626, R2 Score - -11.742125098124822
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/614e4aaf857343e58b3a44b412f38ac0
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.228905813756898, R2 Score - -13.730100714436071
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/bb9170ad38224cd2a7df40dfc14b9ca4
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  9.898251026307602
Test R2:  -13.068272024329442
===== LinearRegression =====
Fold 0: MSE Score - 10.964990561276437, R2 Score - -14.970424355781914
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/c7729ca494cd4694bb24b105009da573
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.16978997458809, R2 Score - -11.678170841784537
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/9077f33c0ebd4e5089eb3a8d88e9eb36
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.202340070545691, R2 Score - -13.691844807090769
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/539d718723314c66991550379c3dae1a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  9.88569771950245
Test R2:  -13.050430151611689
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🏃 View run method-stochastic-lr-0.001-weight_init_mode-xavier-use_momentum-False-reg-LinearRegression at: http://localhost:5000/#/experiments/176410324244826153/runs/80934da
3fe384799855fe6e11b852541
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== LinearRegression =====
Fold 0: MSE Score - 12.295746140851861, R2 Score - -16.90865961470675
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/34e2e467a8d54b8da3e0bab99e08bb44
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 10.35186985848304, R2 Score - -13.312516967288925
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/e5cee5711ab540d083cb5d40bb479a27
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 11.066366289587938, R2 Score - -14.93608279873293
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/24de8663ea5c4ffca2ce15015e32dc81
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  11.251174586870373
Test R2:  -14.99116695066892
===== LinearRegression =====
Fold 0: MSE Score - 11.123327165967645, R2 Score - -15.201040401809582
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/6d9ea3e10acb4b2db151c4e709297e3b
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.286173058250627, R2 Score - -11.839082337233878
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/afb34a33d3834b7784c3d182891e18a3
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.24483367317695, R2 Score - -13.753037573734085
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/35896a7aeae44cf78352b6679460d68a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  9.925751571148966
Test R2:  -13.107358237097468
🏃 View run method-mini-batch-lr-0.001-weight_init_mode-zeros-use_momentum-False-reg-LinearRegression at: http://localhost:5000/#/experiments/176410324244826153/runs/f64be4a6
19304f72b69494f9a048555d
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== LinearRegression =====
Fold 0: MSE Score - 12.29554191089681, R2 Score - -16.908362155349163
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/b411c6fd10f04d9886cc42838047b477
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 10.346867181679986, R2 Score - -13.305600255853753
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/24f0d95463824a7481c5a5ec04d6f54b
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 11.072361827198232, R2 Score - -14.944716652093673
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/e56d098099f84b95ac96b5dca3857d1a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  11.259322476997475
Test R2:  -15.002747454580952
===== LinearRegression =====
Fold 0: MSE Score - 11.123438674684827, R2 Score - -15.201202813397884
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/c5f1440f17b8423a8f7e9ae0559f7538
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.28692265925496, R2 Score - -11.840118737153881
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/26b5af0e599a4d37a589bae0dc87ac4c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.244252388786895, R2 Score - -13.752200497142988
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/fd5f35fddb3d47c9ac6ee1d4c8bddd27
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  9.925413730589748
Test R2:  -13.106878068138798
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🏃 View run method-mini-batch-lr-0.001-weight_init_mode-xavier-use_momentum-False-reg-LinearRegression at: http://localhost:5000/#/experiments/176410324244826153/runs/27c6d9e
588504e52a3ce0a54ec5a65dd
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== LinearRegression =====
Fold 0: MSE Score - 143.6401139200794, R2 Score - -208.21072033731693
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/0a1cf3c2d42f40c19f016877d7309db0
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 143.21258091905335, R2 Score - -197.00601459971952
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/a003b7fbec9e4aabaa8080866aef8fca
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 143.35189541435912, R2 Score - -205.43340504894798
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/45e1fdb188f345cc8a515b64c3a53e28
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  143.0716187298056
Test R2:  -202.34607052321718
===== LinearRegression =====
Fold 0: MSE Score - 41.20095324627466, R2 Score - -59.008871282524765
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/ae52c64370164ddc99d00eee9a67f437
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 39.654555336398225, R2 Score - -53.82647133719538
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/2b455c91151d49338032e67a08976128
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 39.803327482627324, R2 Score - -56.31864514777865
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/8bdee7e6d6d049e4bfa937f7288d0a89
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  39.787844745796036
Test R2:  -55.55001289196953
🏃 View run method-batch-lr-0.001-weight_init_mode-zeros-use_momentum-False-reg-LinearRegression at: http://localhost:5000/#/experiments/176410324244826153/runs/16fc479403694
671b94c043c08a1d438
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== LinearRegression =====
Fold 0: MSE Score - 143.33302106259646, R2 Score - -207.76344195406392
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/309bdb93119a453d99836414bd15cc80
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 143.13975105670843, R2 Score - -196.9053198793659
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/3745f4e04c0e4cd9b5d03509b8da7293
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 144.04251342218828, R2 Score - -206.42792714111985
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/a1f427b9204040bfbb227c3b21f7da85
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  143.75193678174838
Test R2:  -203.31299886160295
===== LinearRegression =====
Fold 0: MSE Score - 41.27110398685947, R2 Score - -59.11104529624151
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/046036e5611f4435ac82ec6535ddae84
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 39.624963742173, R2 Score - -53.78555793698579
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/93ffaaf2ecf240cb82e69348b567c85a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 39.765663878713625, R2 Score - -56.2644078042134
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/99b3a306436f482bb8c4b0697e9fff40
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  39.755771670664885
Test R2:  -55.50442779371303
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🏃 View run method-batch-lr-0.001-weight_init_mode-xavier-use_momentum-False-reg-LinearRegression at: http://localhost:5000/#/experiments/176410324244826153/runs/04bc00b926e7
46999bf1cb122a66a1c5
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== LinearRegression =====
Fold 0: MSE Score - 11.36455758707193, R2 Score - -15.552390653415358
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/acd525749f1f47418e4183198c623529
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.485651978368995, R2 Score - -12.114882310363468
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/4fa350ae85a24143992ecf6845b72139
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.383544308567098, R2 Score - -13.952787348212638
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/70d114e288124cdf94aeca111fbe3c29
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.186129649998481
Test R2:  -13.477430650162315
===== LinearRegression =====
Fold 0: MSE Score - 11.09238299768309, R2 Score - -15.155970458878091
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/7120ee15b3f84f1f836c52016ddc678c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.209250882055956, R2 Score - -11.732729575172751
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/f8dc6d03b3ca4f96b74905d98e7dd684
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.25744084370049, R2 Score - -13.771192486382322
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/c72cbebfa2b54b21afd239a622aa060f
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  9.949946394211475
Test R2:  -13.141746064959099
🏃 View run method-stochastic-lr-0.0001-weight_init_mode-zeros-use_momentum-False-reg-LinearRegression at: http://localhost:5000/#/experiments/176410324244826153/runs/22f2acf
13c02483f8eb6c88e44e9a8d8
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== LinearRegression =====
Fold 0: MSE Score - 11.36305535656527, R2 Score - -15.550202666244964
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/9e443a0851674f7c87159f46c6c2ab5c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.48419512382527, R2 Score - -12.112868060217261
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/36aaec8e31d44f1ba5c28fcdfdb3dd99
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.383032571150714, R2 Score - -13.95205042250231
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/f33adea5a8154120967bfbc1c3a63d73
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  10.185294763537014
Test R2:  -13.476244035494924
===== LinearRegression =====
Fold 0: MSE Score - 11.078009485859718, R2 Score - -15.135035549539204
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/69c728ba077547cfba678faa9e2f8735
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 9.1879053470795, R2 Score - -11.703217193766985
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/14b3b576b02c46f286e99031370098da
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 10.26465421882993, R2 Score - -13.781580082483243
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/7df81bf39eee4365a6d83c70373e5a3c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  9.961829467584808
Test R2:  -13.158635342494776
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🏃 View run method-stochastic-lr-0.0001-weight_init_mode-xavier-use_momentum-False-reg-LinearRegression at: http://localhost:5000/#/experiments/176410324244826153/runs/32a3e9
b550c34d7cb029439b5db62b56
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== LinearRegression =====
Fold 0: MSE Score - 55.636994256839934, R2 Score - -80.0348539012786
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/4d5c0938a56342bdb24e8a7846e3c2b5
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 54.21788957098183, R2 Score - -73.96176777950613
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/8482b6fea6374a00bf5d7c9fc0bc0ba0
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 54.33628945265105, R2 Score - -77.24678715976322
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/2b544b5334c64c019a213243ee026c36
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  54.24905494958451
Test R2:  -76.10356709131143
===== LinearRegression =====
Fold 0: MSE Score - 12.29581117824524, R2 Score - -16.90875434116962
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/b054b1dc6aaf4e6da70a1d4fb2cd14b1
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 10.351880274550517, R2 Score - -13.312531368565653
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/6d5b668883d842b89e79de0ad5ed2b6c
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 11.066271354248045, R2 Score - -14.935946087422508
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/7fef045336554d6d8168164bcfff47ac
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  11.251280659698047
Test R2:  -14.991317710776958
🏃 View run method-mini-batch-lr-0.0001-weight_init_mode-zeros-use_momentum-False-reg-LinearRegression at: http://localhost:5000/#/experiments/176410324244826153/runs/55b53f9
d1cf44d128d480990061cf8d6
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== LinearRegression =====
Fold 0: MSE Score - 55.69346763930145, R2 Score - -80.11710694816239
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/1f2804264f634a2bb4b8344b178b3c11
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 54.02883372411533, R2 Score - -73.70037876930479
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/a7741b668f62419296434e24dfa4f02a
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 54.35959614207693, R2 Score - -77.2803498778891
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/9de330dfa85049a78b68bc8dfdce258e
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  54.260106232226875
Test R2:  -76.11927415410639
===== LinearRegression =====
Fold 0: MSE Score - 12.296020682492731, R2 Score - -16.90905948249355
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/749cf8a00d4242b5b2b57ae885a3bd9b
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 10.351357294346304, R2 Score - -13.311808295038968
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/b2f057b37428480c9548b877ad4887f7
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 11.073153926366308, R2 Score - -14.945857311782401
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/6274147ec5ee43f2a028174f96d63c43
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  11.259071283571798
Test R2:  -15.002390436211364
```

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🏃 View run method-mini-batch-lr-0.0001-weight_init_mode-xavier-use_momentum-False-reg-LinearRegression at: http://localhost:5000/#/experiments/176410324244826153/runs/c343b6
05b939442aa547adba668dbf53
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== LinearRegression =====
Fold 0: MSE Score - 166.85008937943263, R2 Score - -242.01587094840926
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/5a7ec1572d924a8a87cae7abc51abec1
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 166.2080012815151, R2 Score - -228.79953099888186
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/1487502059da470aade06ef2b8e990ce
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 166.36407278984532, R2 Score - -238.5720121073388
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/2f1b18c8f5714e718ed35c0739527b86
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  166.07414668052257
Test R2:  -235.03930285263044
===== LinearRegression =====
Fold 0: MSE Score - 144.0201463409933, R2 Score - -208.76423463329678
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/b394eb8ec4c44062bbc430aede1105d6
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 143.20986615184827, R2 Score - -197.0022611568907
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/399c85fa0b454de6a4d31b4bd3aa8bfa
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 143.349696231942, R2 Score - -205.43023812385516
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/00363f38e2804f97a1522d157bbb886b
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  143.0697280293026
Test R2:  -202.34338329201626
🏃 View run method-batch-lr-0.0001-weight_init_mode-zeros-use_momentum-False-reg-LinearRegression at: http://localhost:5000/#/experiments/176410324244826153/runs/5be8fa4f18b9
44029e2d22ffd68187a1
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
===== LinearRegression =====
Fold 0: MSE Score - 166.45936475462736, R2 Score - -241.44678353975874
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/520b54fbe074422b80a4f12ecb46ff0f
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 166.67681406687788, R2 Score - -229.44771253871141
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/e53761ce24074005927c5acb1ebee0e4
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 166.34374501818857, R2 Score - -238.54273916952351
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/75081eb295574b2c90c9942b61e58e96
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  166.0809398912679
Test R2:  -235.04895796608733
===== LinearRegression =====
Fold 0: MSE Score - 144.37427840941328, R2 Score - -209.28002526522226
🏃 View run Fold-0 at: http://localhost:5000/#/experiments/176410324244826153/runs/6981aa49d5aa419e87fd7182cf0029ef
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 1: MSE Score - 142.67311610607462, R2 Score - -196.26014941839804
🏃 View run Fold-1 at: http://localhost:5000/#/experiments/176410324244826153/runs/1c52eeb636bd490ea0f4e33d2bfe79bb
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Fold 2: MSE Score - 143.18699039294273, R2 Score - -205.19593413876393
🏃 View run Fold-2 at: http://localhost:5000/#/experiments/176410324244826153/runs/736c56d79f84463181bbd39fd3dc51ee
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
Test MSE:  142.89595618391468
Test R2:  -202.09640333721515
```

```
🏃 View run method-batch-lr-0.0001-weight_init_mode-xavier-use_momentum-False-reg-LinearRegression at: http://localhost:5000/#/experiments/176410324244826153/runs/f3d370d2561f4cc7adfdfa8211df1b99
🧪 View experiment at: http://localhost:5000/#/experiments/176410324244826153
```

Perform the prediction on the test set

In [51]:
```
best_model = joblib.load('method-batch-lr-0.01-weight_init_mode-xavier-use_momentum-False-reg-Polynomial.joblib')
```

In [94]:
```
y_pred=best_model.predict(X_test,True)
y_pred
```

Out[94]:
```
array([12.82661759, 14.06262702, 13.1518727 , ..., 11.83491208,
       13.67542873, 13.85056552], shape=(2409,))
```

In [93]:
```
y_test
```

Out[93]:
```
array([12.32385568, 13.71015004, 12.67607627, ..., 11.91839057,
       13.38472764, 12.61153775], shape=(2409,))
```

In [ ]:
```
#display mse and r2
mse = best_model.mse(y_test, y_pred)
r2  = best_model.r2(y_test, y_pred)
print(f"Test MSE: {mse:.4f}")
print(f"Test R² : {r2:.4f}")
```

```
Test MSE: 4.2762
Test R² : -5.0777
```

Feature importance

In [52]:
```
coefs = best_model._coef()
print(coefs)
```

```
[ 1.25706601 -0.09521258  0.12593619  1.16826513  0.72752792  2.24233199
  1.40295171  0.58442913  0.33751488  0.18003627  0.06296529  0.27919168
  0.00588243  0.28942599  0.3064238   0.69982129  2.22745491  1.41581406
  0.56407736  0.33921204  0.17016865  0.0649241 ]
```

In [ ]:
```
coefs = np.ravel(best_model._coef())
BASE_FEATURES = [
    "year", "km_driven", "mileage", "max_power",
    "fuel_Petrol", "transmission_Manual",
    "seller_type_Individual", "seller_type_Trustmark Dealer",
    "owner_2", "owner_3", "owner_4"]
```

In [ ]:
```
def guess_degree_bias(n_coefs: int, n_base: int):
    for deg in range(1, 6):
        for inc_bias in (False, True):
            expect = (deg * n_base) + (1 if inc_bias else 0)
            if expect == n_coefs:
                return deg, inc_bias
    return None, None
```

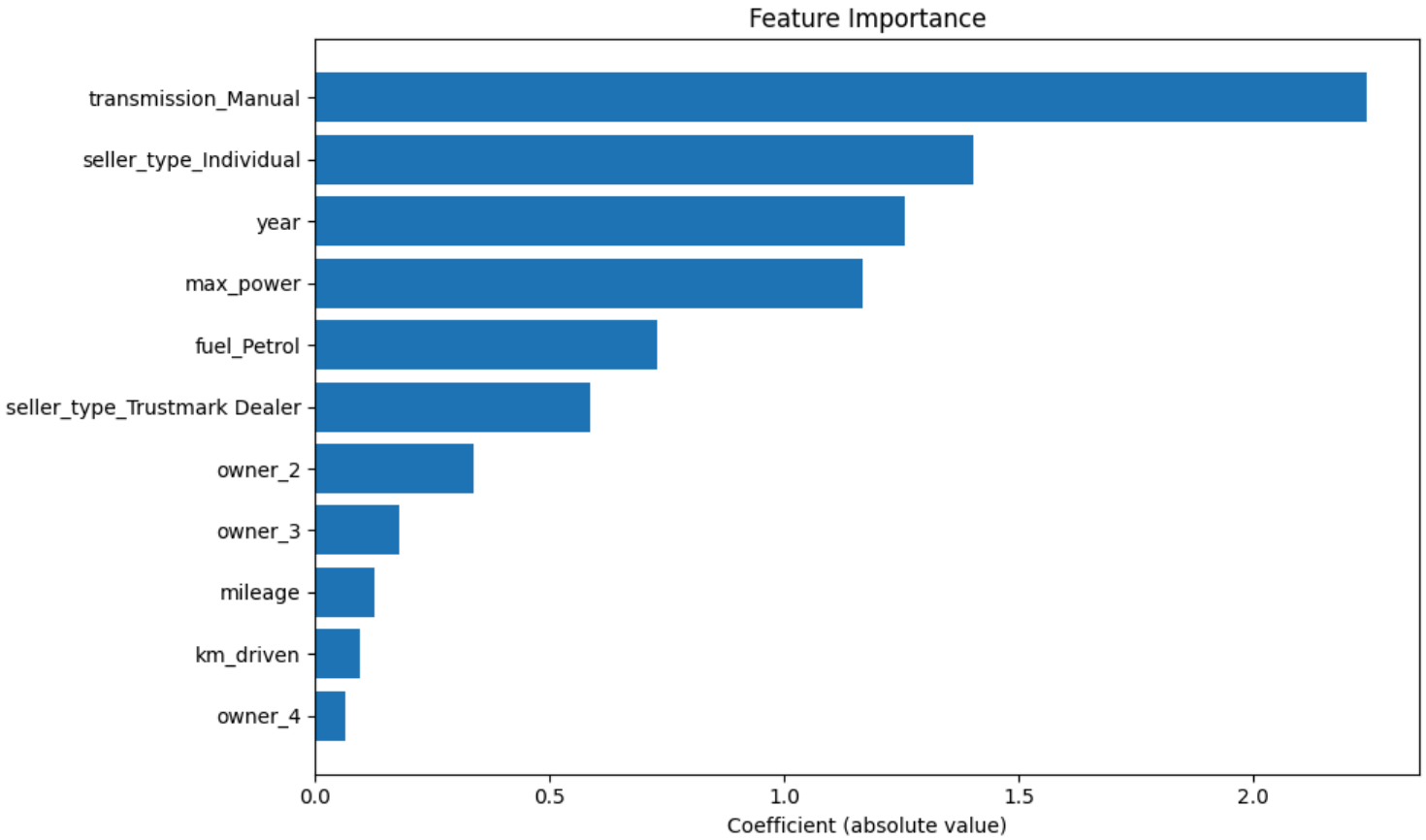
```
DEGREE, INCLUDE_BIAS = guess_degree_bias(len(coefs), len(BASE_FEATURES))
print(f"degree = {DEGREE}, include_bias = {INCLUDE_BIAS}")
```

```
degree = 2, include_bias = False
```

In [57]:
```
def my_poly_feature_names(base_feats, degree, include_bias=True):
    names = []
    if include_bias:
        names.append("bias")
    for d in range(1, degree + 1):
        for f in base_feats:
            names.append(f if d == 1 else f"{f}^{d}")
    return names

feature_names = my_poly_feature_names(BASE_FEATURES, DEGREE, INCLUDE_BIAS)
```

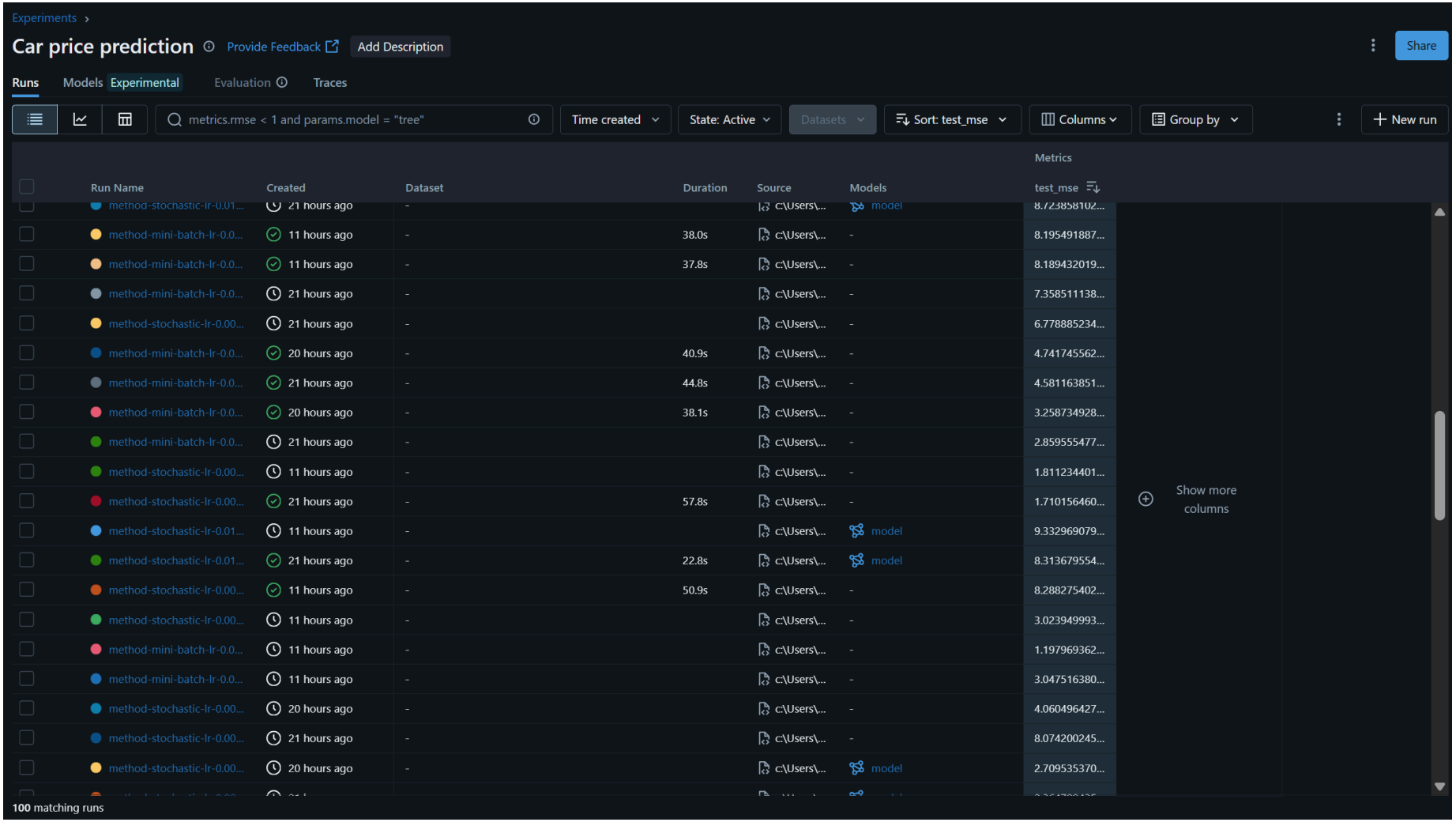
In [ ]:
```
import pandas as pd
import matplotlib.pyplot as plt

df_imp = (pd.DataFrame({"feature": feature_names, "coef": coefs})
            .assign(abs_coef=lambda d: d["coef"].abs()))
df_linear = df_imp[~df_imp["feature"].str.contains(r"\^")]

df_linear = df_linear.sort_values("abs_coef", ascending=False)

print(df_linear)

# plot
plt.figure(figsize=(10,6))
plt.barh(df_linear["feature"], df_linear["abs_coef"])
plt.gca().invert_yaxis()
plt.xlabel("Coefficient (absolute value)")
plt.title("Feature Importance")
plt.tight_layout()
plt.show()
```

```
                        feature      coef  abs_coef
5            transmission_Manual  2.242332  2.242332
6         seller_type_Individual  1.402952  1.402952
0                           year  1.257066  1.257066
3                      max_power  1.168265  1.168265
4                    fuel_Petrol  0.727528  0.727528
7   seller_type_Trustmark Dealer  0.584429  0.584429
8                        owner_2  0.337515  0.337515
9                        owner_3  0.180036  0.180036
2                        mileage  0.125936  0.125936
1                      km_driven -0.095213  0.095213
10                       owner_4  0.062965  0.062965
```



Report

MLflow (screenshots)



Feature Importance (Polynomial)

The chart above shows the feature importance (measured by the absolute values of the regression coefficients) derived from the **Polynomial model**.

Observations:

- `transmission_Manual` has the largest coefficient magnitude, indicating that the type of transmission (manual vs. automatic) plays the most significant role in predicting car prices.
- `seller_type_Individual` and `year` follow, suggesting that the seller type (individual vs. dealer) and the car's manufacturing year strongly.
- `max_power` and `fuel_Petrol` also contribute substantially, reflecting the importance of engine power and fuel type.
- Other features such as `owner_2`, `mileage`, and `km_driven` have smaller coefficients, meaning they have less impact on the model compared to the top features.

Final Summary

After running **144 experiments** across different configurations, we evaluated all models based on their **MSE** and **R^2** scores.

- The best-performing custom model was:
  `method=batch, lr=0.01, weight_init_mode=xavier, use_momentum=False, reg=Polynomial`

However, despite being the best within our custom implementations, its predictive performance was still **worse than the RandomForestRegressor model** (old model).
This highlights that while Polynomial Regression (with careful hyperparameter tuning) can capture non-linear patterns, ensemble tree-based methods like Random Forest remain more robust and accurate for this dataset.