```
import pandas as pd


df = pd.read_excel('//content/car.xlsx')
df
```

	brand	model	transmission	age	fuel	price	mileage	power	seats
0	18	244	1	4	1	1231000.0	19.01	4.496471	5
1	10	263	1	6	4	786000.0	19.01	4.496471	5
2	31	123	1	2	1	1489000.0	19.01	4.496471	5
3	9	55	0	1	4	1227000.0	19.01	4.496471	5
4	8	82	1	3	1	887000.0	19.01	4.496471	5
...	...	...	...	...	...	...	...	...	...
32009	5	199	1	6	4	292000.0	19.01	4.496471	5
32010	32	295	1	6	4	534000.0	19.01	4.496471	5
32011	33	25	1	8	4	424000.0	19.01	4.496471	5
32012	10	120	0	5	4	685000.0	19.01	4.496471	5
32013	31	247	1	2	4	392000.0	19.01	4.496471	5

32014 rows × 9 columns

```
X = df.drop('price',axis=1)
y = df['price']


from sklearn.model_selection import train_test_split
X_train,X_test,y_train,y_test = train_test_split(X,y,test_size=0.2,random_state=True)


from sklearn.svm import SVR
from sklearn.metrics import mean_squared_error, r2_score
from sklearn.model_selection import cross_val_score

# Initialize SVR with default parameters
svr = SVR()

# Train the model
svr.fit(X_train, y_train)

# Predict
y_train_pred = svr.predict(X_train)
y_test_pred = svr.predict(X_test)

# Evaluate
print("Train R2:", r2_score(y_train, y_train_pred))
print("Test R2:", r2_score(y_test, y_test_pred))
print("Train MSE:", mean_squared_error(y_train, y_train_pred))
print("Test MSE:", mean_squared_error(y_test, y_test_pred))

# Cross-validation (5 folds)
cv_scores = cross_val_score(svr, X, y, cv=5, scoring='r2')
print("Cross-validation R2 scores:", cv_scores)
print("Mean CV R2 score:", cv_scores.mean())
```

```
Train R2: -0.0682296269065108
Test R2: -0.06589322941156839
Train MSE: 538688829688.6744
Test MSE: 484623079035.0006
Cross-validation R2 scores: [-0.1087027  -0.09583394 -0.05430585 -0.07953712 -0.00264558]
Mean CV R2 score: -0.06820503773850124
```