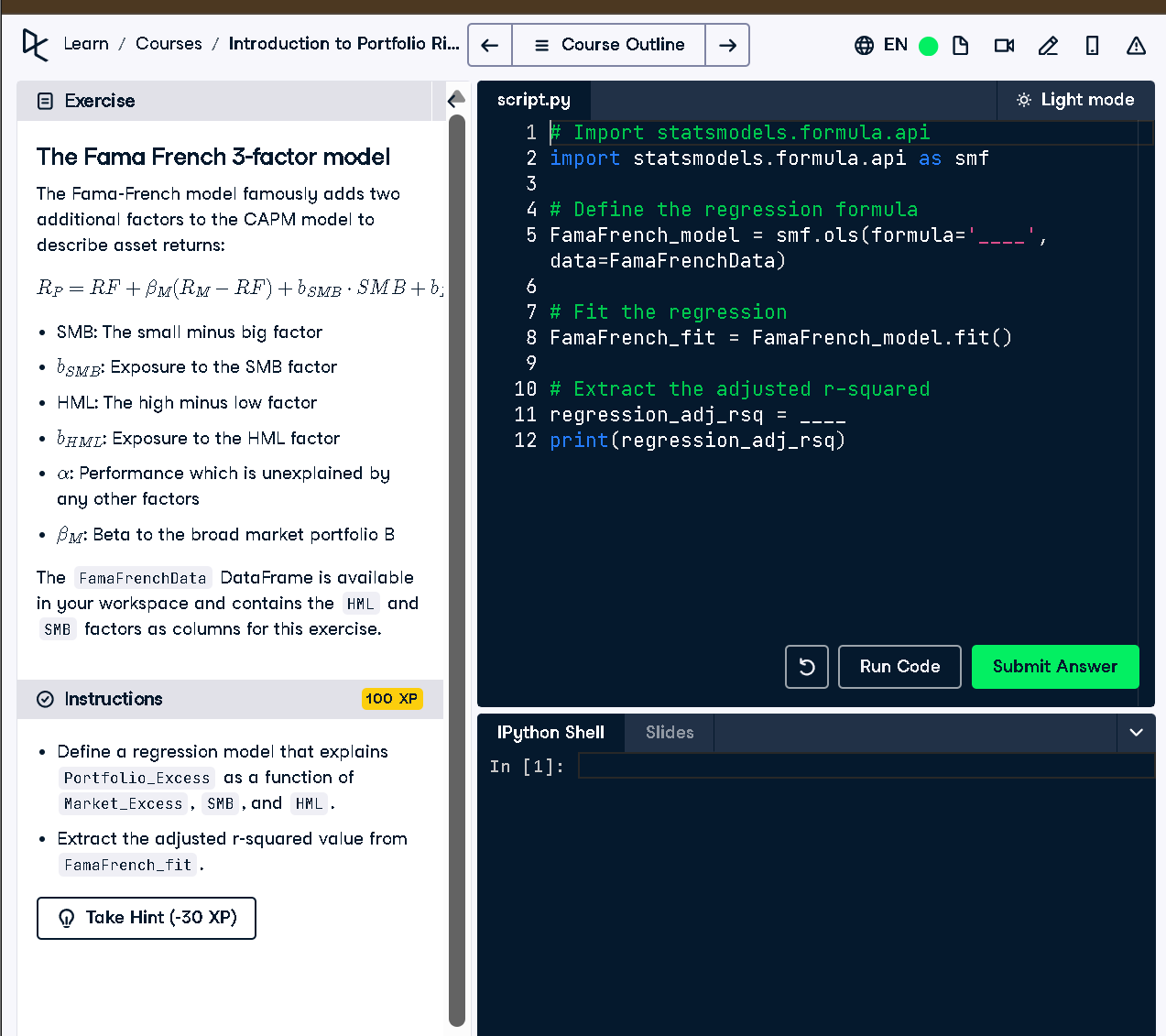
# Fama French 3-Factor Model - Python Solution



## ✅ Python Code Solution:

# Import statsmodels.formula.api  
import statsmodels.formula.api as smf  
  
# Define the regression formula  
FamaFrench\_model = smf.ols(formula='Portfolio\_Excess ~ Market\_Excess + SMB + HML', data=FamaFrenchData)  
  
# Fit the regression  
FamaFrench\_fit = FamaFrench\_model.fit()  
  
# Extract the adjusted r-squared  
regression\_adj\_rsq = FamaFrench\_fit.rsquared\_adj  
print(regression\_adj\_rsq)

## 💡 50-Word Explanation:

This code fits the Fama-French 3-factor model, which explains stock returns using market excess return, SMB (small minus big), and HML (high minus low) factors. It uses linear regression to estimate the model and then extracts the adjusted R-squared to evaluate how well the model explains the data, considering complexity.