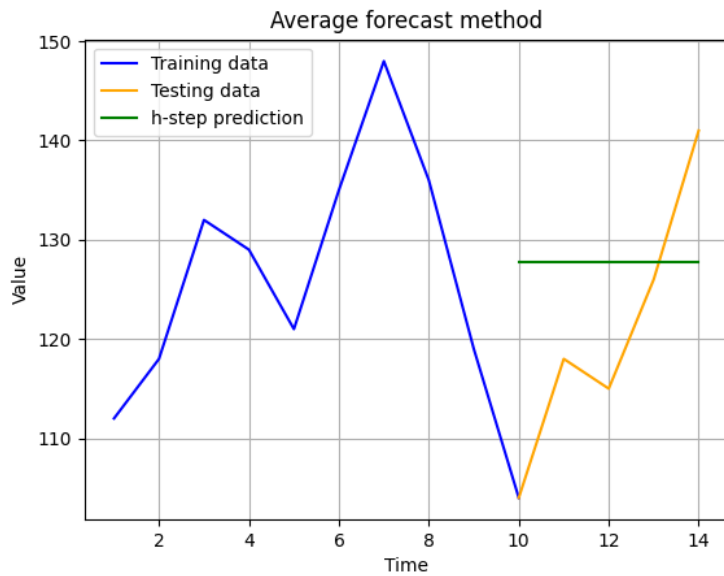


Time Series Analysis Homework 2

Rajkumar Conjeevaram Mohan

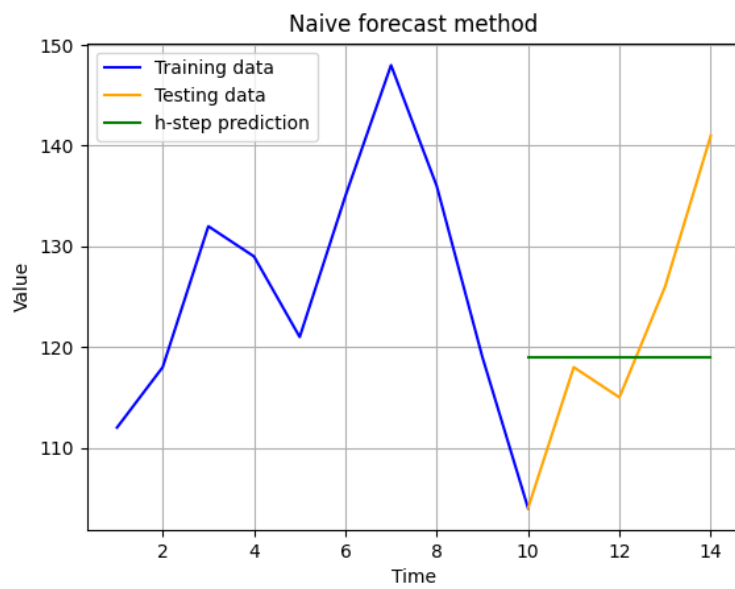
Question 2



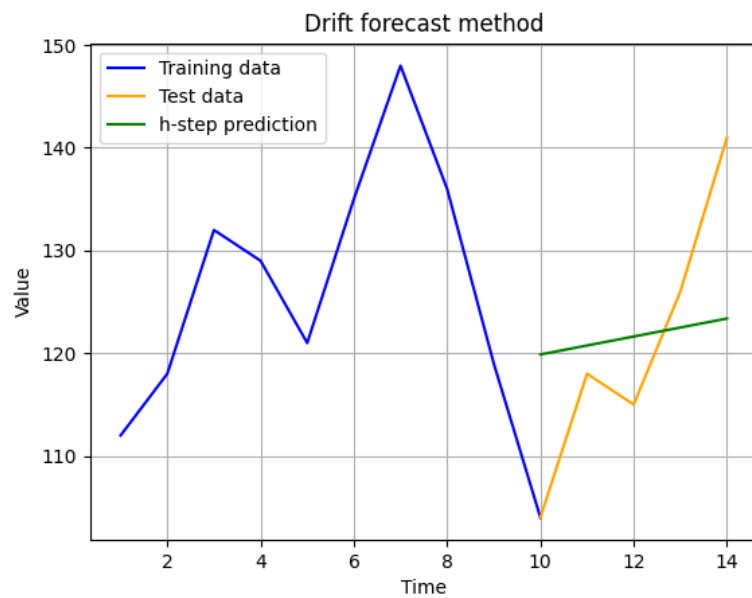
Questions/Steps 3 - 5 and Question 10/Step 10 for forecast methods – Average, Naïve, Drift and SES are aggregated together in a single table for clarity.

	Prediction MSE	Forecast MSE	Pred. Var	Forec. Var	Q
Average	176.619813	200.449383	108.082252	151.76000	4.502482
Naive	152.428571	155.000000	152.408163	151.76000	3.517844
Drift	195.675258	125.271875	167.819123	124.59125	3.981923
SES a=0	460.000000	229.200000	82.530612	151.76000	3.792334
SES a=0.25	201.529883	211.804810	127.581100	151.76000	3.488071
SES a=0.75	161.175644	160.461240	159.268727	151.76000	3.551525
SES a=0.99	152.946900	154.413032	152.915337	151.76000	3.523011

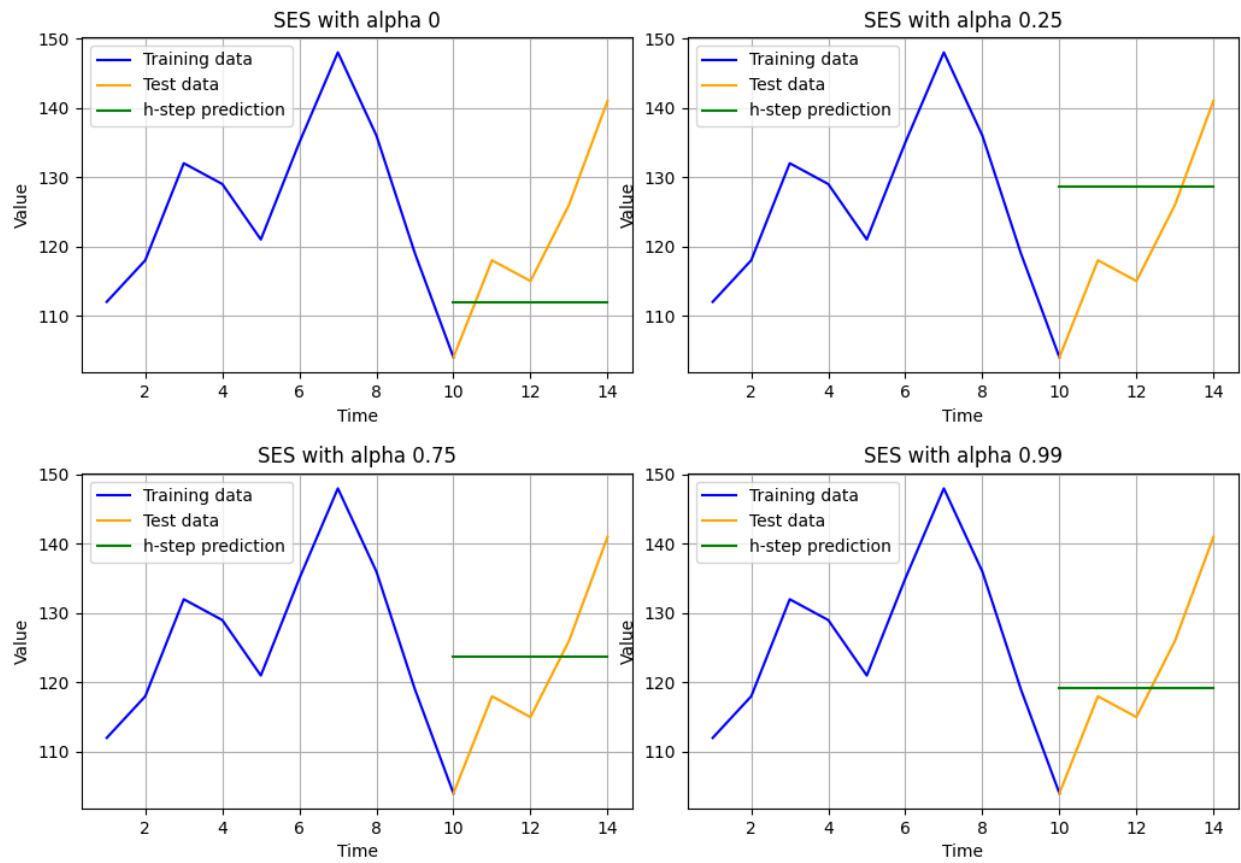
Step 2 of Question 6



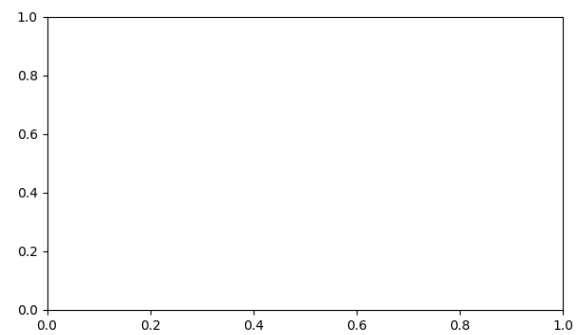
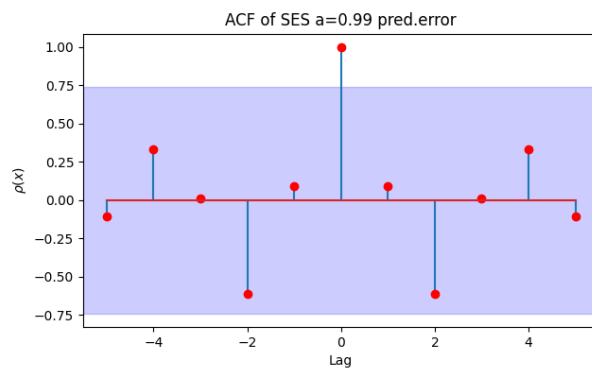
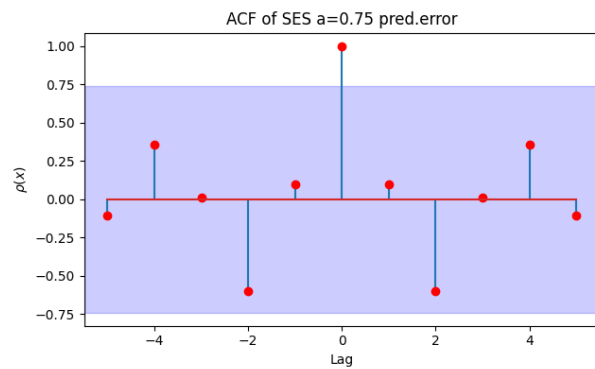
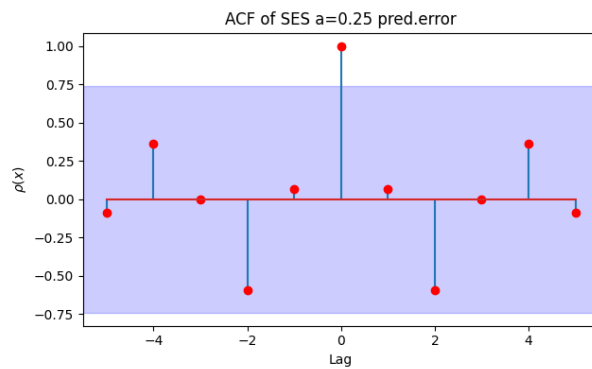
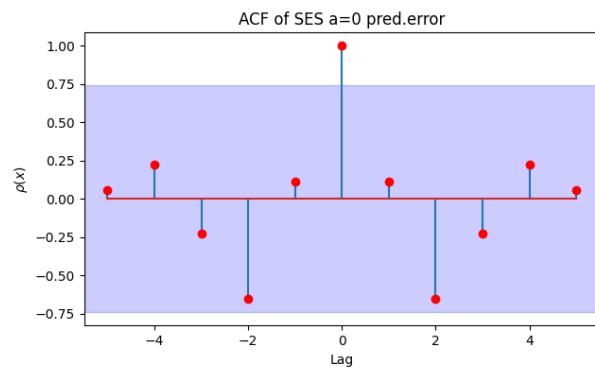
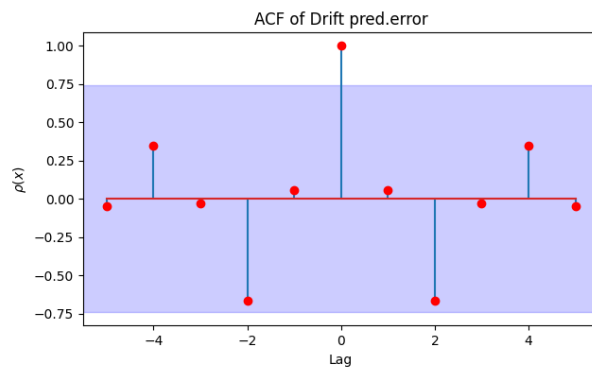
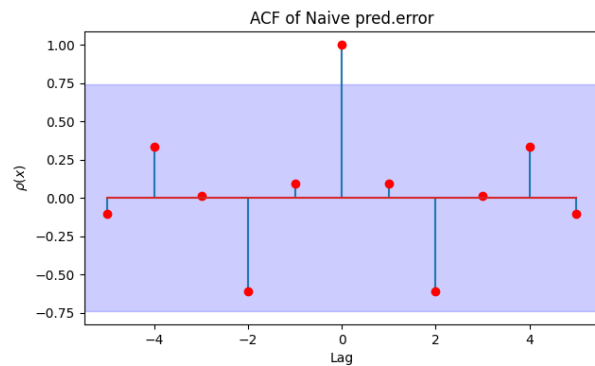
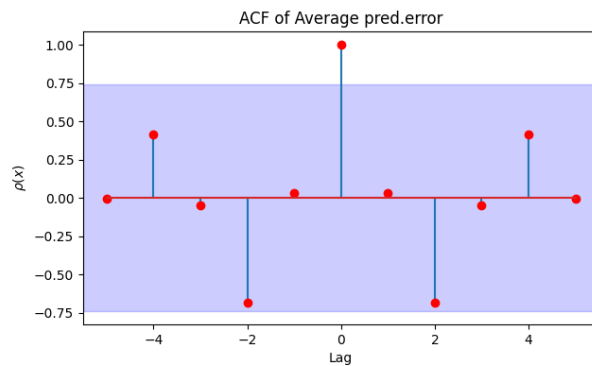
Step 2 of Question 7



Question 9



Question 11



Question 12

Comparing the results from Questions 10 and 11, I believe the Drift forecast is a better model given its lowest MSE and variance on the forecast.