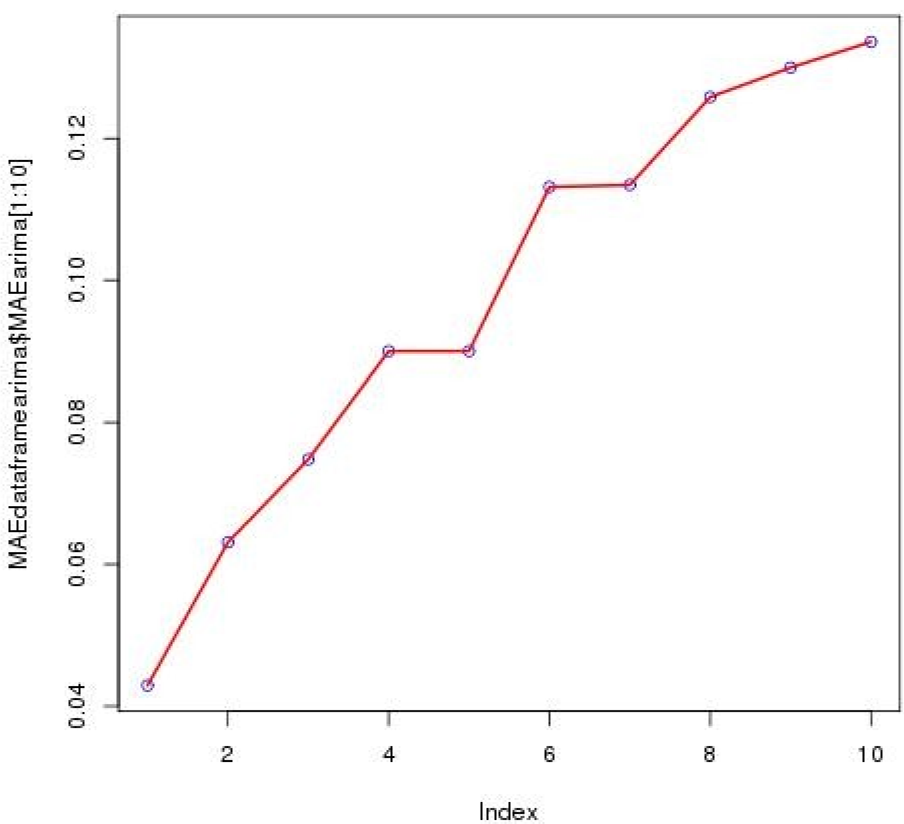
Name:Vishwas Shanbhog
UBIT number:50135707

CSE587 HOMEWORK2 PROJECT REPORT

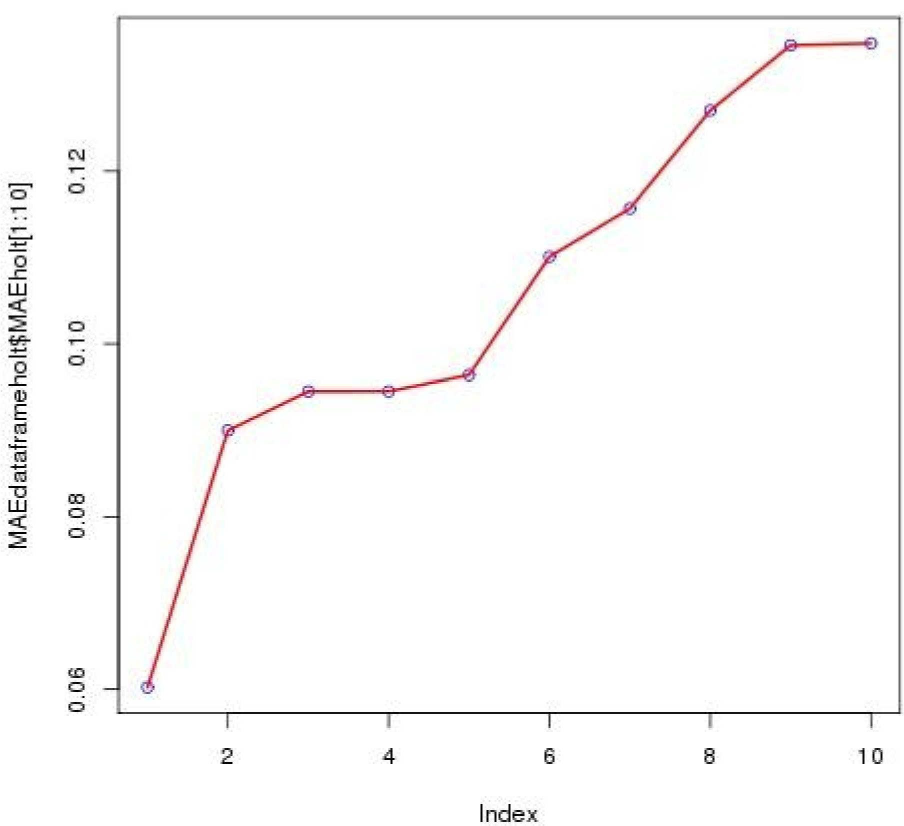
In this assignment we were given to implement Linear regression model,Holt Winters model and Arima model to perform time series forecast of the stock price on the small dataset. R programming was used to implement this model. The program executed in 105804 seconds.

Plot of Arima model:-



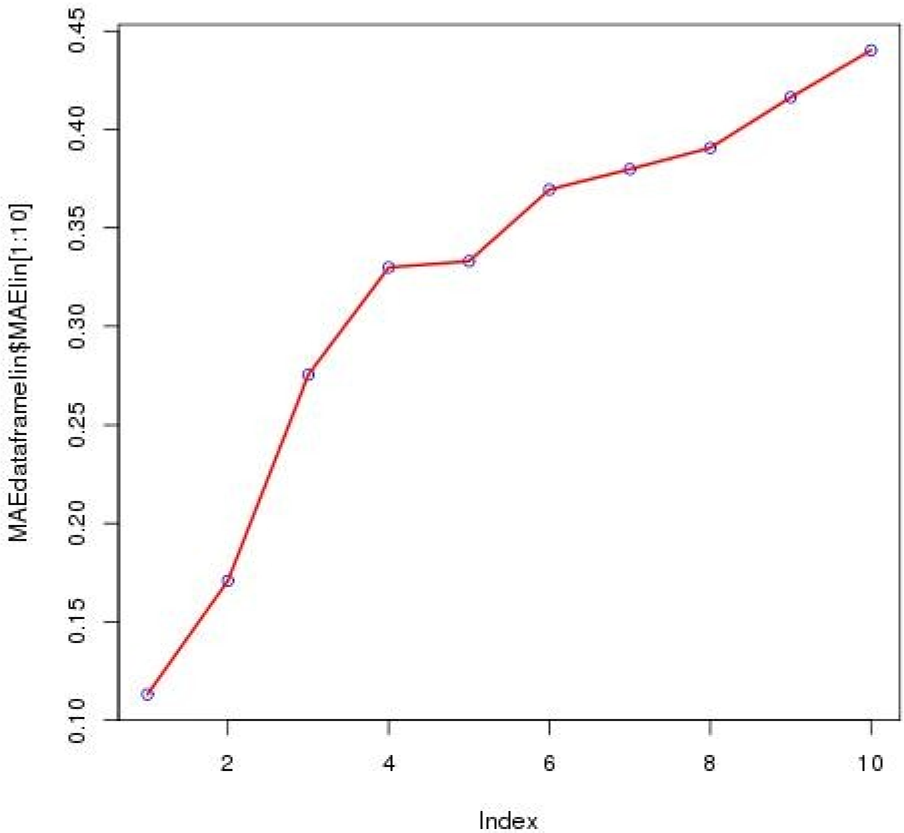
Filename	Error(MAE)
COCO.csv	0.04291029
APWC.csv	0.06308866
FREE.csv	0.07480337
IKAN.csv	0.09000000
SPU.csv	0.09000000
ELON.csv	0.11315610
VLYWW.csv	0.11343679
MTSL.csv	0.12583623
CPST.csv	0.13000000
IBCA.csv	0.13363392

Plot Of Holtwinters-Model:-



Filename	**Error(MAE)**
EDS.csv	0.06022709
VLYWW.csv	0.09000000
IKAN.csv	0.09451631
JOEZ.csv	0.09452480
APWC.csv	0.09639256
MTSL.csv	0.11008672
COCO.csv	0.11565898
HNSN.csv	0.12703413
TINY.csv	0.13458633
IBCA.csv	0.13481835

Linear regression Model



Filename	MAE(Error)
GRVY.csv	0.1130815
ELON.csv	0.1708333
SMSI.csv	0.2753055
PCTI.csv	0.3298646
BYFC.csv	0.3330336
TAIT.csv	0.3694651
STB.csv	0.3798104
STLY.csv	0.3906403
BLRX.csv	0.4163314
WFD.csv	0.4402484