

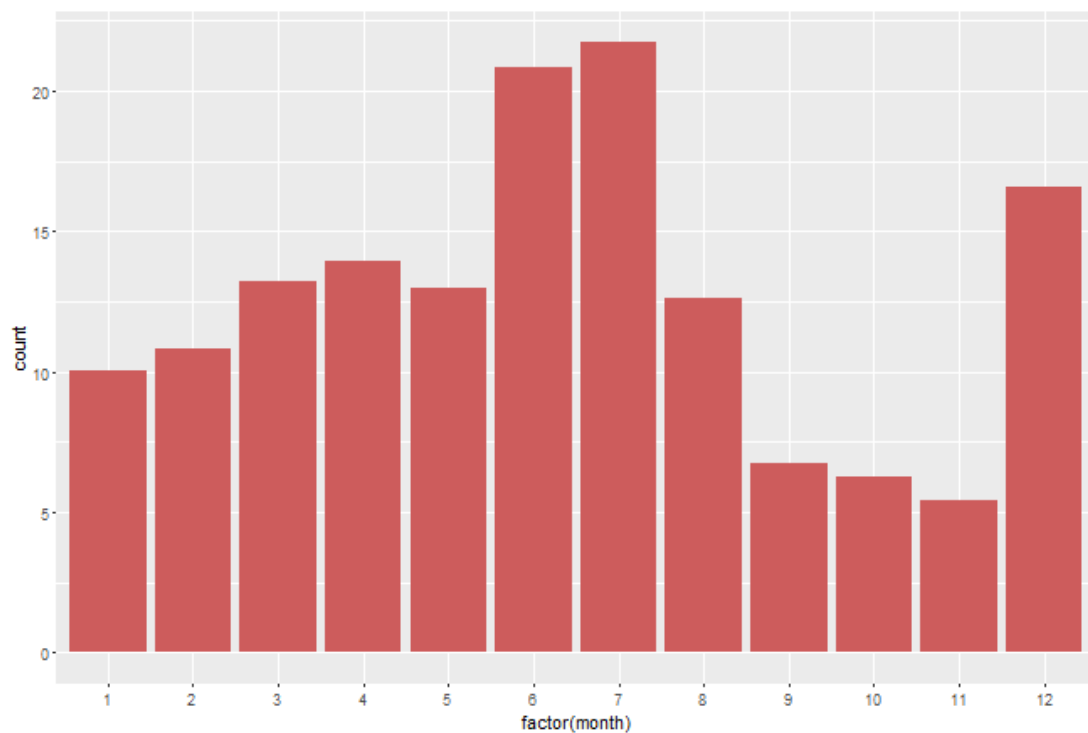
Econ 294 Final  
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1505094

a)

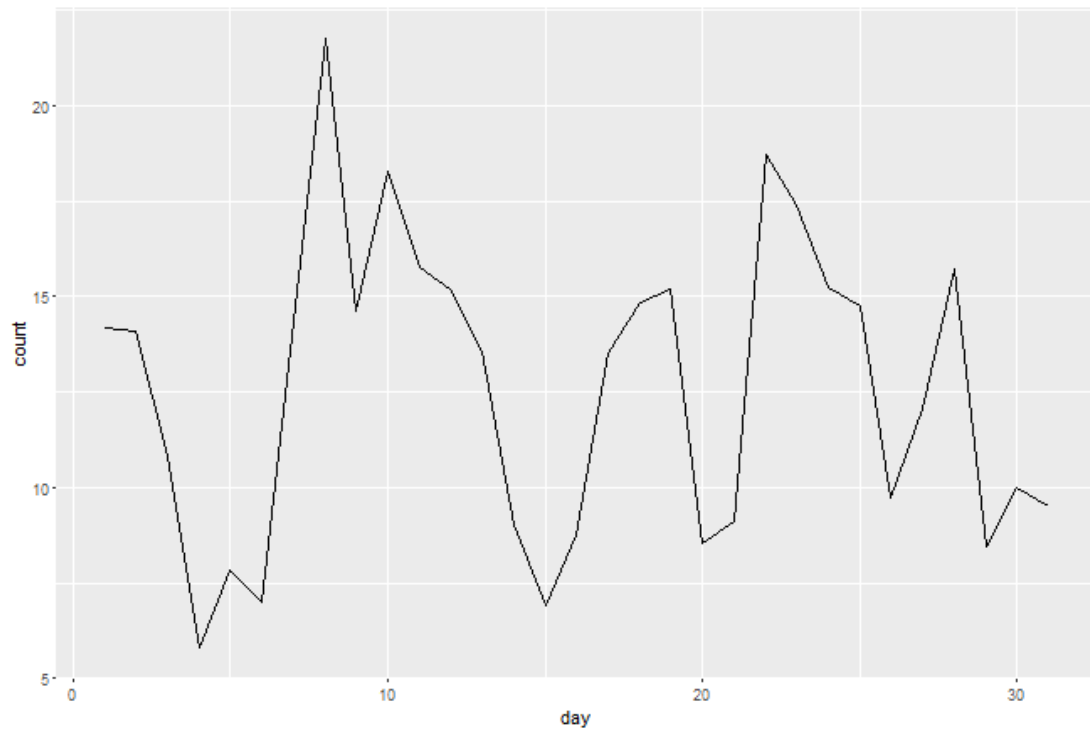
cor.temp	cor.dewp	cor.humid	cor.wind_dir	cor.wind_speed	cor.pressure	cor.visib
0.1289826	0.1245619	0.02285754	-0.02596744	-0.01627221	0.01545038	0.01948515

According to the above output, the correlations among temperature, humidity, pressure, visibility and delay time are positive, while the other factors, such as wind speed, have negative correlations with delay time.

b)

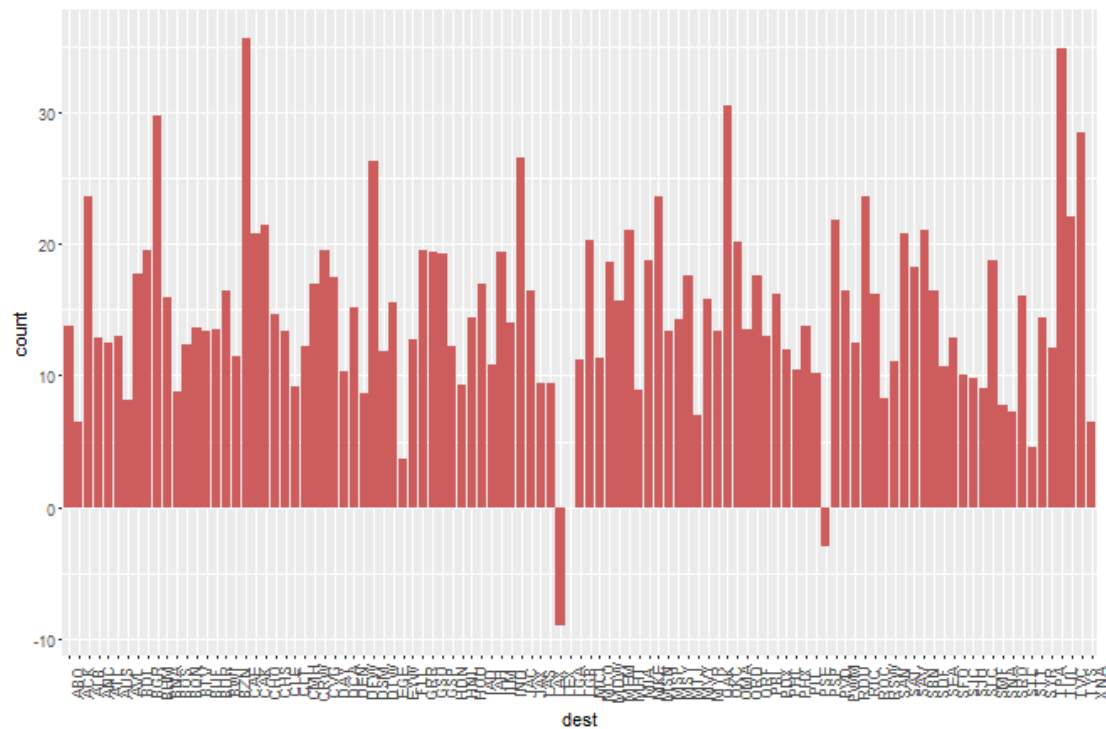


From the above plot, the frequency of delay on June, July and September is exceptionally high, while the one on September, October and November is fairly low.

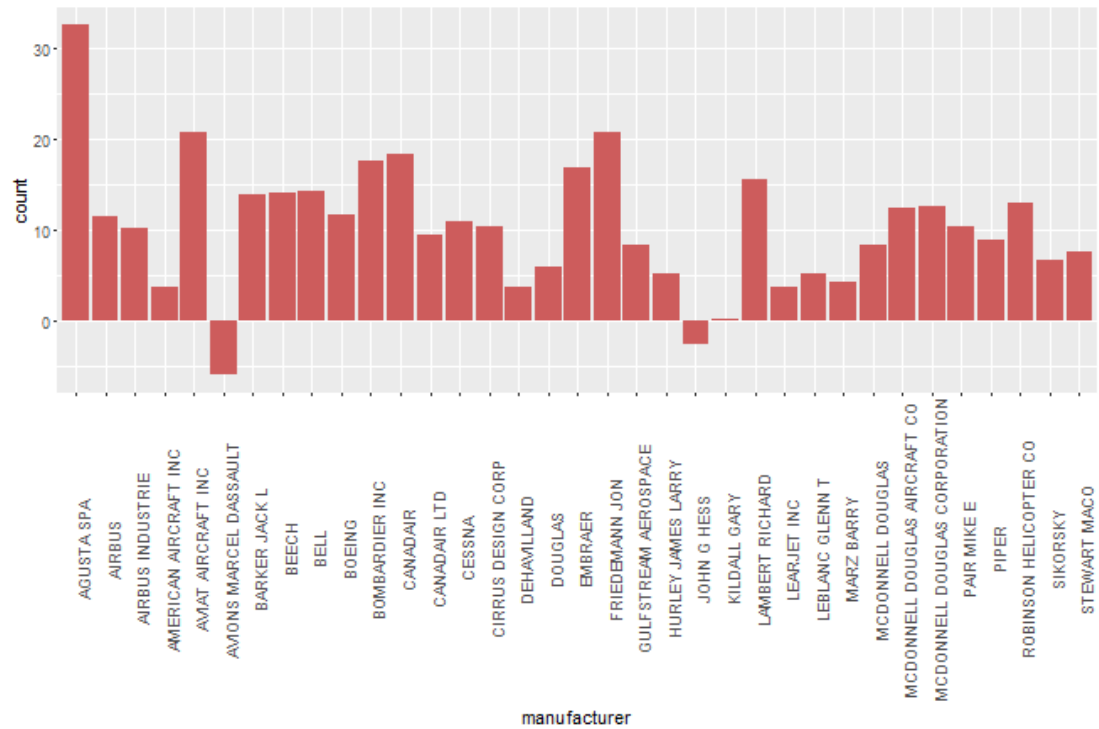


From the above plot, it is obvious that the frequency of delay around 8<sup>th</sup>, 10<sup>th</sup>, 22<sup>nd</sup> of every month is pretty high, while some dates, such as 4<sup>th</sup>, 15<sup>th</sup>, come with exceptionally low delay frequency.

c)



From the above plot, we could know that the flights from NY to BHM, DSM, CAE, OKC, RIC, TUL and TYS are easy to commit delay.



It can be seen that flights made by AVIONS MARCEL DASSAULT and JOHN G HESS two manufacturers have negative mean value of dep\_delay, meaning that these flights are almost early every time, especially for flights made by AVIONS MARCEL DASSAULT. It easily can be seen that flights using 3 engines tend to avoid delay because they have the minimum mean value of dep\_delay. So we should expect takeoff delays and cancellations at New York City airports in 2013 when destination is LEX and in months 6 , 7 and 12.