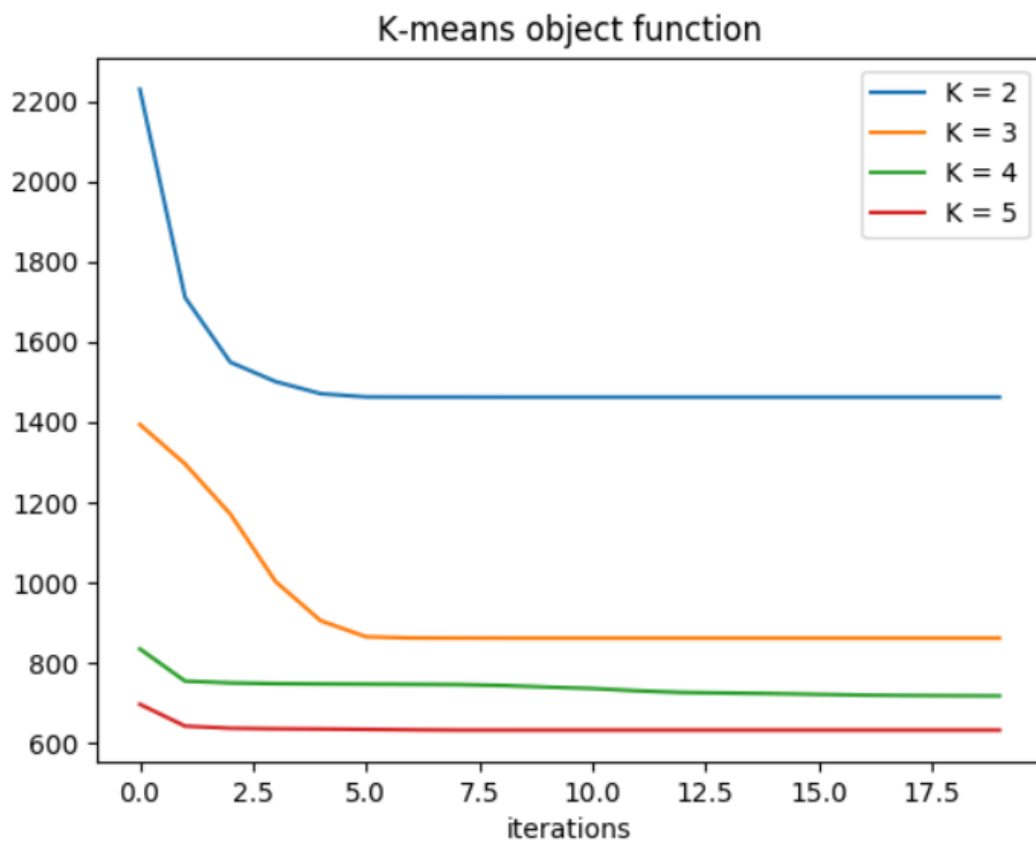


# COMS W4903: Machine Learning for Data Science

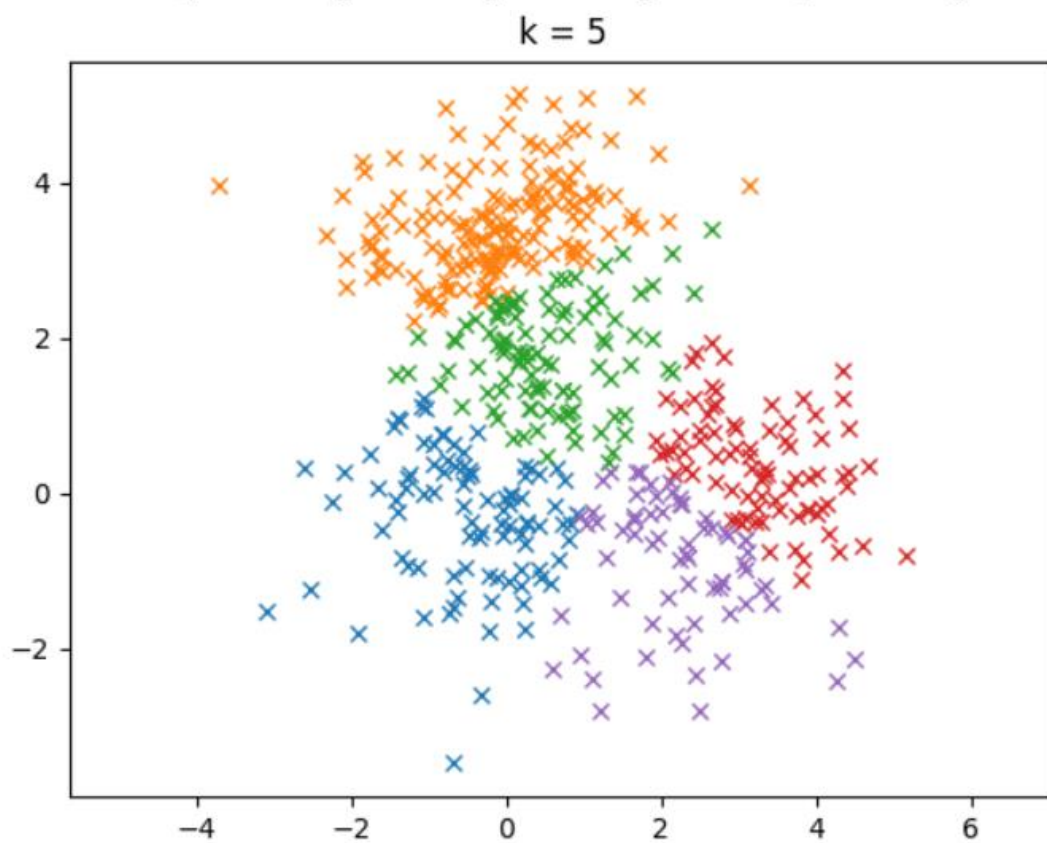
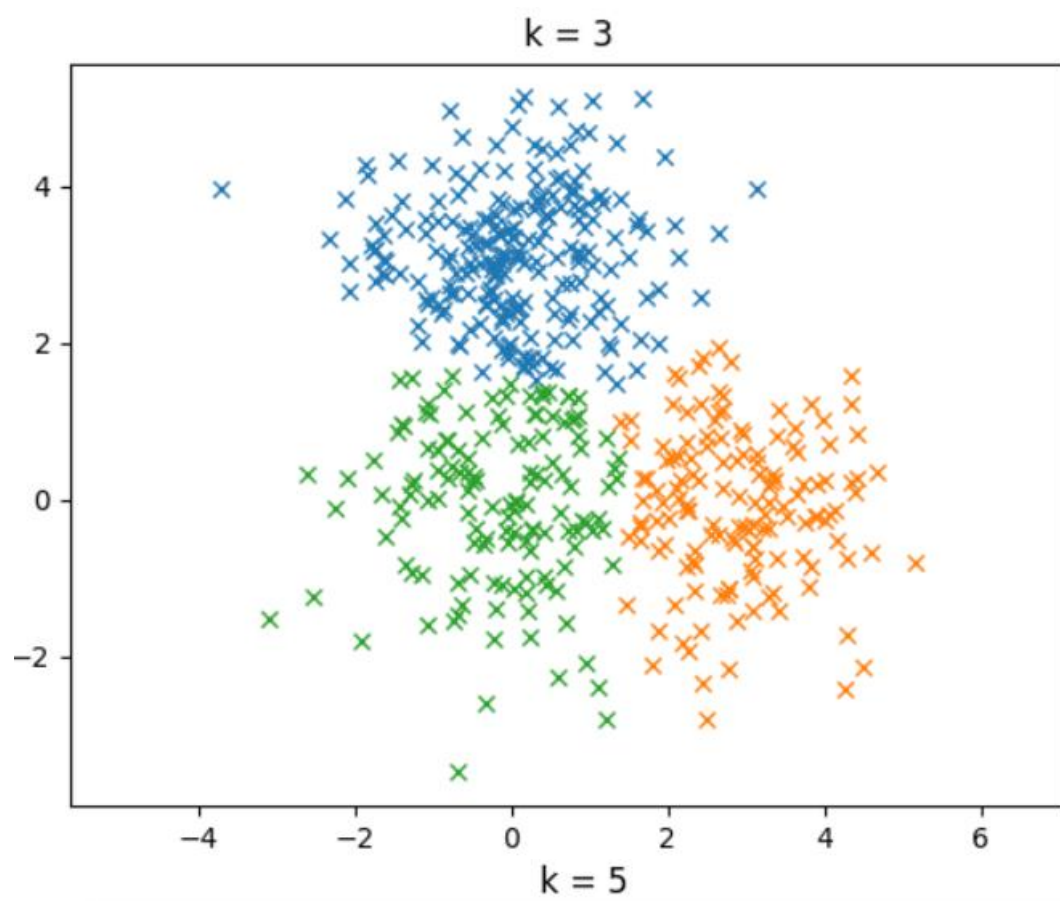
## Homework 4

jc4609

1.  
a).



b).



2.  
a).

objective value	RMSE
[-9.09233067e+04	1.08149261e+00]
[-9.09645468e+04	1.11108698e+00]
[-9.09794822e+04	1.09597505e+00]
[-9.09852177e+04	1.11245291e+00]
[-9.10825776e+04	1.10229931e+00]
[-9.10842867e+04	1.12442738e+00]
[-9.11341702e+04	1.09863701e+00]
[-9.11675335e+04	1.15922809e+00]
[-9.13103879e+04	1.12415439e+00]
[-9.14192655e+04	1.11960750e+00]]

b).

Star Wars:

Movie name	Distance
Empire Strikes Back, The (1980)	0.08023623
Return of the Jedi (1983)	0.36698259
Raiders of the Lost Ark (1981)	0.37362356
Princess Bride, The (1987)	0.67948257
Blues Brothers, The (1980)	0.72254196
Indiana Jones and the Last Crusade (1989)	0.84997649
Leading Man, The (1996)	0.87601577
Fish Called Wanda, A (1988)	0.93956176
Gandhi (1982)	1.00621683
Back to the Future (1985)	1.00815685

My Fair Lady:

Movie name	Distance
Mary Poppins (1964)	0.60856493
Sabrina (1954)	0.61733097
Cinderella (1950)	0.75279217
SubUrbia (1997)	0.89672923
Return of Martin Guerre, The (Retour de Martin Guerre, Le) (1982)	0.91152718
Sound of Music, The (1965)	0.98645379
Snow White and the Seven Dwarfs (1937)	1.0126714
Emma (1996)	1.03246604
Babe (1995)	1.06123973
Jungle Book, The (1994)	1.08572685

Goodfellas:

Movie name	Distance
Once Upon a Time in the West (1969)	0.15551964
Casino (1995)	0.29174291
Full Metal Jacket (1987)	0.45282384
Shining, The (1980)	0.53413304
Donnie Brasco (1997)	0.62710969
Body Snatcher, The (1945)	0.64848554
Raising Arizona (1987)	0.6648835
'Cool Hand Luke (1967)	0.69473626
Bonnie and Clyde (1967)	0.73234339
Apocalypse Now (1979)	0.74259553