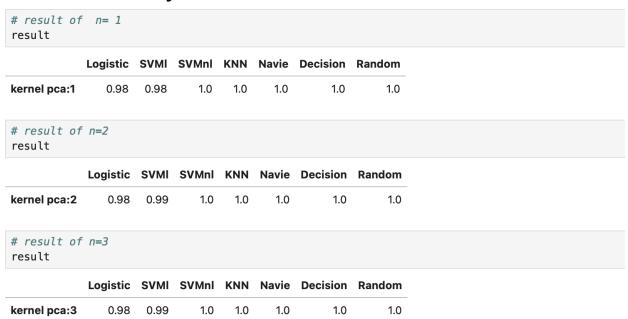
Kernel PCA Analysis

Dataset:

	age	bp	al	su	bgr	bu	sc	sod	pot	hrmo	 pc_normal	pcc_present	ba_present	htn_ye
0	2.000000	76.459948	3.0	0.0	148.112676	57.482105	3.077356	137.528754	4.627244	12.518156	 False	False	False	Fals
1	3.000000	76.459948	2.0	0.0	148.112676	22.000000	0.700000	137.528754	4.627244	10.700000	 True	False	False	Fals
2	4.000000	76.459948	1.0	0.0	99.000000	23.000000	0.600000	138.000000	4.400000	12.000000	 True	False	False	Fals
3	5.000000	76.459948	1.0	0.0	148.112676	16.000000	0.700000	138.000000	3.200000	8.100000	 True	False	False	Fals
4	5.000000	50.000000	0.0	0.0	148.112676	25.000000	0.600000	137.528754	4.627244	11.800000	 True	False	False	Fals
394	51.492308	70.000000	0.0	0.0	219.000000	36.000000	1.300000	139.000000	3.700000	12.500000	 True	False	False	Fals
395	51.492308	70.000000	0.0	2.0	220.000000	68.000000	2.800000	137.528754	4.627244	8.700000	 True	False	False	Tru
396	51.492308	70.000000	3.0	0.0	110.000000	115.000000	6.000000	134.000000	2.700000	9.100000	 True	False	False	Tru
397	51.492308	90.000000	0.0	0.0	207.000000	80.000000	6.800000	142.000000	5.500000	8.500000	 True	False	False	Tru
398	51.492308	80.000000	0.0	0.0	100.000000	49.000000	1.000000	140.000000	5.000000	16.300000	 True	False	False	Fals

Classification Analysis:



Here, SVMnI, KNN and Naive, Decision and Random forest provide best accuracy apart from other algorithms when no of components are set to 2.

Regression Analysis:

result of n=1 result Linear SVMI SVMnl Decision Random **kernel pca:1** 0.826638 0.820956 0.965765 1.0 0.996094 # result of n=2 result **SVMnl Decision Random** Linear SVMI **kernel pca:2** 0.864973 0.854808 0.969676 1.0 0.99566 # result of n=3 result Linear SVMI **SVMnI Decision Random kernel pca:3** 0.864336 0.858808 0.963474 1.0 0.99566 # result of n=4 result Linear SVMI **SVMnl Decision Random kernel pca:4** 0.88848 0.879838 0.967913 1.0 1.0 result Linear SVMI **SVMnI Decision Random kernel pca:5** 0.883158 0.875968 0.965758 1.0 1.0

Here, Decision and Random Forest provides the best r2 score apart from other algorithms when no of components are set to 4.