```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
%matplotlib inline
# For Filtering the warnings
import warnings
warnings.filterwarnings('ignore')
data = pd.read_csv('kidney_disease.csv')
data.head()
\overline{\rightarrow}
         id
             age
                    bp
                             al su
                                          rbc
                                                     рc
                                                              рсс
                                                                          ba ... pcv
                                                                                          wc
                          sg
         0 48.0 80.0
                       1.020 1.0 0.0
                                         NaN
                                                 normal
                                                        notpresent notpresent
                                                                                    44 7800
             7.0 50.0 1.020 4.0 0.0
                                                                                    38 6000 N
                                         NaN
                                                 norma
                                                        notpresent notpresent
            62.0
                  80.0
                       1.010 2.0
                                  3.0
                                      normal
                                                                                    31
                                                                                        7500 N
                                                 normal
                                                        notpresent notpresent
          3 48.0 70.0
                       1.005 4.0 0.0
                                                                                        6700
                                       normal abnormal
                                                           present notpresent
                                                                                    32
         4 51.0 80.0 1.010 2.0 0.0 normal
                                                                                    35 7300
                                                 normal
                                                        notpresent notpresent
     5 rows × 26 columns
ckd=chronic kidney disease
```

data.info()

```
<class 'pandas.core.frame.DataFrame'>
     RangeIndex: 400 entries, 0 to 399
     Data columns (total 26 columns):
      #
          Column
                          Non-Null Count Dtype
     0
          id
                          400 non-null
                                           int64
      1
          age
                          391 non-null
                                           float64
      2
                          388 non-null
                                           float64
      3
                          353 non-null
                                           float64
          sg
                          354 non-null
                                           float64
      4
          al
      5
          su
                          351 non-null
                                           float64
      6
          rbc
                          248 non-null
                                           object
                          335 non-null
                                           object
          рс
      8
          рсс
                          396 non-null
                                           object
          ba
                          396 non-null
                                           object
      10
                          356 non-null
                                           float64
          bgr
      11
          bu
                          381 non-null
                                           float64
      12
          sc
                          383 non-null
                                           float64
      13
          sod
                          313 non-null
                                           float64
                          312 non-null
                                           float64
      14
          pot
      15
          hemo
                          348 non-null
                                           float64
                          330 non-null
                                           object
         pcv
      17
                          295 non-null
                                           object
          WC
      18
          rc
                          270 non-null
                                           object
      19
          htn
                          398 non-null
                                           object
      20
          dm
                          398 non-null
                                           object
      21
          cad
                          398 non-null
                                           object
      22
          appet
                          399 non-null
                                           object
                          399 non-null
      23
                                           object
          pe
                          399 non-null
      24
          ane
                                           object
      25 classification 400 non-null
                                           object
     dtypes: float64(11), int64(1), object(14)
     memory usage: 81.4+ KB
data.classification.unique()
array(['ckd', 'ckd\t', 'notckd'], dtype=object)
data.classification=data.classification.replace("ckd\t","ckd")
data.classification.unique()
array(['ckd', 'notckd'], dtype=object)
```

```
data.drop('id', axis = 1, inplace = True)
```

data.head()

```
\overline{2}
         age
               bp
                           al
                                      rbc
                                                           рсс
                                                                       ba
                                                                             bgr
                                                                                              wc
                      sg
                               su
                                                 рс
                                                                                 ... pcv
     0 48.0 80.0
                   1.020
                          1.0
                              0.0
                                     NaN
                                             normal
                                                    notpresent notpresent
                                                                           121.0
                                                                                        44
                                                                                            7800
         7.0
             50.0
                   1.020 4.0 0.0
                                     NaN
                                                                            NaN
                                                                                        38
                                                                                            6000
                                             norma
                                                     notpresent notpresent
        62.0
              80.0
                   1.010 2.0
                              3.0 normal
                                             normal
                                                                           423.0
                                                                                        31
                                                                                            7500
                                                     notpresent notpresent
        48.0 70.0 1.005 4.0 0.0 normal
                                                                           117.0
                                                                                        32
                                                                                            6700
                                           abnormal
                                                        present notpresent
        51.0 80.0 1.010 2.0 0.0 normal
                                                                                        35
                                                                                            7300
                                             normal notpresent notpresent
                                                                          106.0
    5 rows × 25 columns
```

data['classification'] = data['classification'].replace(['ckd', 'notckd'], [1,0])

data.head()

```
\rightarrow
                          al
                                                                       ba
         age
               bp
                      sg
                               su
                                      rbc
                                                 рс
                                                           pcc
                                                                            bgr
                                                                                 ... pcv
                                                                                              WC
     0 48.0 80.0
                   1.020
                          1.0
                              0.0
                                                                           121.0
                                                                                            7800
                                     NaN
                                             normal notpresent notpresent
                                                                                        44
         7.0
             50.0 1.020 4.0 0.0
                                     NaN
                                                                            NaN
                                                                                        38
                                                                                            6000
                                             normal
                                                     notpresent notpresent
        62.0
              80.0
                   1.010 2.0
                              3.0 normal
                                                                          423.0
                                                                                        31
                                                                                            7500
                                             normal
                                                    notpresent notpresent
       48.0 70.0 1.005 4.0 0.0 normal
                                           abnormal
                                                                           117.0
                                                                                        32
                                                                                            6700
                                                        present notpresent
     4 51.0 80.0 1.010 2.0 0.0 normal
                                                                                           7300
                                             normal notpresent notpresent
                                                                          106.0
                                                                                        35
    5 rows × 25 columns
```

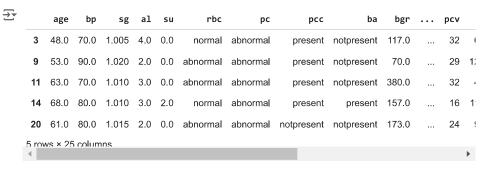
data.isnull().sum()

```
₹
                            9
     age
                           12
     bp
                           47
     sg
                           46
     al
                           49
     SU
     rbc
                          152
     рс
                           65
                            4
     рсс
     ba
                            4
                           44
     bgr
                           19
     bu
     sc
                           17
     sod
                           87
                           88
     pot
                           52
     hemo
     pcv
                           70
     WC
                          105
                          130
     rc
     htn
                            2
     dm
                            2
     \mathsf{cad}
                            2
                            1
     appet
                            1
     ane
     classification
                            Ø
     dtype: int64
```

df = data.dropna(axis = 0)
print(f"Before dropping all NaN values: {data.shape}")
print(f"After dropping all NaN values: {df.shape}")

Before dropping all NaN values: (400, 25)
After dropping all NaN values: (158, 25)

df.head()



df.index = range(0,len(df),1)
df.head()

₹		age	bp	sg	al	su	rbc	рс	рсс	ba	bgr	 pcv	
	0	48.0	70.0	1.005	4.0	0.0	normal	abnormal	present	notpresent	117.0	 32	6
	1	53.0	90.0	1.020	2.0	0.0	abnormal	abnormal	present	notpresent	70.0	 29	12
	2	63.0	70.0	1.010	3.0	0.0	abnormal	abnormal	present	present notpresent		 32	4:
	3	68.0	80.0	1.010	3.0	2.0	normal	abnormal	present	present present		 16	110
	4	61.0	80.0	1.015	2.0	0.0	abnormal	abnormal	notpresent	notpresent	173.0	 24	9;
	5 rc	ws × 2	5 colu	mns									
	4												•

for i in df['wc']:
 print(i)

 $\overline{\Rightarrow}$

```
6600
     7400
     9500
     6700
     7800
     6600
     7200
     6800
df['wc']=df['wc'].replace(["\t6200","\t8400"],[6200,8400])
for i in df['wc']:
    print(i)
    4300
\overrightarrow{\pm^*}
     10700
     7500
     4700
     7000
     6700
     7300
     7700
     5500
     8100
     7900
     7200
     7300
     9900
     7000
     5800
     6800
     6300
     7400
     11000
     5200
     6000
     5800
     5400
     10300
     9300
     10500
     6700
     9400
     10300
     9300
     6500
     10500
     9200
     8000
     9700
     9100
     6400
     5400
     6500
     6000
     5100
     11000
     8000
     5700
     6200
     9500
     7200
     6300
     5800
     6600
     7400
     9500
     6700
     7800
     6600
     7200
     6800
df.info()
<class 'pandas.core.frame.DataFrame'>
     RangeIndex: 158 entries, 0 to 157
     Data columns (total 25 columns):
```

```
# Column
                  Non-Null Count Dtype
                                 float64
                  158 non-null
```

```
158 non-null
                                   float64
    bp
                   158 non-null
                                   float64
 2
    sg
                                   float64
3
    al
                   158 non-null
 4
                   158 non-null
                                   float64
    su
                   158 non-null
5
    rbc
                                   object
                   158 non-null
                                   object
 6
    рс
    рсс
                   158 non-null
                                   object
                   158 non-null
 8
    ba
                                   object
                   158 non-null
                                   float64
 9
    bgr
                                   float64
 10
   bu
                   158 non-null
 11 sc
                   158 non-null
                                   float64
                   158 non-null
                                   float64
 12 sod
                   158 non-null
                                   float64
 13
    pot
 14 hemo
                   158 non-null
                                   float64
 15
    pcv
                   158 non-null
                                   object
 16 wc
                   158 non-null
                                   int64
 17 rc
                   158 non-null
                                   object
 18 htn
                   158 non-null
                                   object
                   158 non-null
                                   object
 19 dm
                   158 non-null
                                   object
 20 cad
 21
    appet
                   158 non-null
                                   object
22 pe
                   158 non-null
                                   object
 23 ane
                   158 non-null
                                   object
 24 classification 158 non-null
                                   int64
dtypes: float64(11), int64(2), object(12)
memory usage: 31.0+ KB
```

df['pcv']=df['pcv'].astype(int)
df['wc']=df['wc'].astype(int)
df['rc']=df['rc'].astype(float)

df.info()

<</pre>
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 158 entries, 0 to 157
Data columns (total 25 columns):

рата	columns (total .	•								
#	Column	Non-Null Count	Dtype							
0	age	158 non-null	float64							
1	bp	158 non-null	float64							
2	sg	158 non-null	float64							
3	al	158 non-null	float64							
4	su	158 non-null	float64							
5	rbc	158 non-null	object							
6	рс	158 non-null	object							
7	pcc	158 non-null	object							
8	ba	158 non-null	object							
9	bgr	158 non-null	float64							
10	bu	158 non-null	float64							
11	SC	158 non-null	float64							
12	sod	158 non-null	float64							
13	pot	158 non-null	float64							
14	hemo	158 non-null	float64							
15	pcv	158 non-null	int32							
16	WC	158 non-null	int32							
17	rc	158 non-null	float64							
18	htn	158 non-null	object							
19	dm	158 non-null	object							
20	cad	158 non-null	object							
21	appet	158 non-null	object							
22	pe	158 non-null	object							
23	ane	158 non-null	object							
24	classification	158 non-null	int64							
	, , , ,	int32(2), int64	(1), object(10)							
memory usage: 29.8+ KB										

object_dtypes = df.select_dtypes(include = 'object')
object_dtypes.head()

→		rbc	рс	рсс	ba	htn	dm	cad	appet	pe	ane	
	0	normal	abnormal	present	notpresent	yes	no	no	poor	yes	yes	
	1	abnormal	abnormal abnormal		notpresent	yes	yes	no	poor	no	yes	
	2	abnormal	abnormal	present	notpresent	yes	yes	no	poor	yes	no	
	3	normal abnorma		present	present	yes	yes	yes	poor	yes	no	
	4	abnormal	abnormal	notpresent	notpresent	ves	ves	ves	poor	ves	ves	

```
5/19/24, 7:11 AM
```

```
dictonary = {
        "rbc": {
        "abnormal":1,
        "normal": 0,
    },
        "pc":{
        "abnormal":1,
        "normal": 0,
    },
        "pcc":{
        "present":1,
        "notpresent":0,
    },
        "ba":{
        "notpresent":0,
        "present": 1,
    },
        "htn":{
        "yes":1,
        "no": 0,
    },
        "dm":{
        "yes":1,
        "no":0,
    },
        "cad":{
        "yes":1,
        "no": 0,
    },
        "appet":{
        "good":1,
        "poor": 0,
    },
        "pe":{
        "yes":1,
        "no":0,
    },
        "ane":{
        "yes":1,
        "no":0,
    }
}
df=df.replace(dictonary)
df.head()
₹
               bp
         age
                      sg
                          al
                               su rbc pc
                                           pcc ba
                                                      bgr
                                                               pcv
                                                                       wc
                                                                           rc htn dm cad
     0 48.0 70.0 1.005 4.0 0.0
                                    0
                                                 0
                                                    117.0
                                                                32
                                                                     6700 3.9
                                                                                  1
                                                                                     0
                                                                                          0
      1 53.0
             90.0
                   1.020 2.0 0.0
                                     1
                                        1
                                                 0
                                                     70.0
                                                                29
                                                                    12100 3.7
                                                                                     1
                                                                                          0
                                             1
                                                                                  1
     2 63.0 70.0 1.010 3.0 0.0
                                     1
                                        1
                                             1
                                                 0
                                                    380.0
                                                                32
                                                                     4500 3.8
                                                                                  1
                                                                                     1
                                                                                          0
     3 68.0 80.0 1.010 3.0 2.0
                                    0
                                        1
                                                 1
                                                    157.0
                                                                16
                                                                    11000 2.6
                                                                                     1
                                                                                          1
                                             1
                                                                                  1
                                                                     9200 3.2
      4 61.0 80.0 1.015 2.0 0.0
                                    1 1
                                             0
                                                0
                                                   173.0
                                                                24
                                                                                  1
                                                                                     1
     5 rows × 25 columns
import seaborn as sns
```

```
plt.figure(figsize = (20,20))
sns.heatmap(df.corr(), annot = True, fmt=".2f",linewidths=0.5)
```

<AxesSubplot:>

<ax< th=""><th colspan="14"><pre><axessubplot:></axessubplot:></pre></th></ax<>	<pre><axessubplot:></axessubplot:></pre>																								
age	1.00	0.08	-0.28	0.25	0.21	0.15	0.19	0.12	0.07	0.30	0.19	0.19	-0.10	0.01	-0.25	-0.24	0.15	-0.24	0.37	0.32	0.27	-0.17	0.23	0.11	0.31
윤 -	0.08	1.00	-0.20	0.32	0.24	0.32	0.18	0.21	0.17	0.19	0.32	0.39	-0.22	0.13	-0.28	-0.35	0.01	-0.23	0.33	0.22	0.26	-0.15	0.12	0.31	0.33
87 -	-0.28	-0.20	1.00	-0.71	-0.45	-0.50	-0.63	-0.46	-0.52	-0.54	-0.55	-0.56	0.54	-0.08	0.68	0.68	-0.29	0.62	-0.65	-0.64	-0.38	0.52	-0.63	-0.41	-0.79
ъ -	0.25	0.32	-0.71	1.00	0.52	0.49	0.75	0.50	0.52	0.52	0.66	0.70	-0.60	0.21	-0.78	-0.78	0.31	-0.64	0.80	0.68	0.37	-0.58	0.62	0.57	0.93
≅ -	0.21	0.24	-0.45	0.52	1.00	0.26	0.34	0.18	0.38	0.73	0.31	0.35	-0.24	0.27	-0.39	-0.40	0.20	-0.38	0.58	0.59	0.47	-0.22	0.37	0.18	0.51
ъ. Т	0.15	0.32	-0.50	0.49	0.26	1.00	0.50	0.17	0.27	0.49	0.38	0.41	-0.34	-0.02	-0.45	-0.42	0.11	-0.38	0.44	0.51	0.29	-0.42	0.28	0.21	0.59
я. -	0.19	0.18	-0.63	0.75	0.34	0.50	1.00	0.60	0.48	0.43	0.61	0.59	-0.52	0.18	-0.73	-0.72	0.17	-0.67	0.67	0.64	0.38	-0.53	0.61	0.55	0.78
DC -	0.12	0.21	-0.46	0.50	0.18	0.17	0.60	1.00	0.42	0.26	0.37	0.36	-0.47	-0.03	-0.53	-0.53	0.15	-0.50	0.43	0.32	0.35	-0.43	0.35	0.49	0.51
B -	0.07	0.17	-0.52	0.52	0.38	0.27	0.48	0.42	1.00	0.32	0.21	0.23	-0.22	-0.00	-0.41	-0.40	0.17	-0.34	0.31	0.37	0.30	-0.19	0.39	0.14	0.47
bgr	0.30	0.19	-0.54	0.52	0.73	0.49	0.43	0.26	0.32	1.00	0.33	0.33	-0.28	0.10	-0.43	-0.44	0.21	-0.42	0.58	0.66	0.46	-0.34	0.34	0.14	0.59
3 -	0.19	0.32	-0.55	0.66	0.31	0.38	0.61	0.37	0.21	0.33	1.00	0.90	-0.49	0.25	-0.71	-0.71	0.13	-0.62	0.62	0.57	0.31	-0.50	0.58	0.65	0.68
Я-	0.19	0.39	-0.56	0.70	0.35	0.41	0.59	0.36	0.23	0.33	0.90	1.00	-0.53	0.14	-0.72	-0.73	0.12	-0.64	0.66	0.57	0.32	-0.51	0.62	0.66	0.70
pos -	-0.10	-0.22	0.54	-0.60	-0.24	-0.34	-0.52	-0.47	-0.22	-0.28	-0.49	-0.53	1.00	-0.05	0.58	0.57	-0.18	0.47	-0.53	-0.47	-0.22	0.49	-0.47	-0.56	-0.64
bot -	0.01	0.13	-0.08	0.21	0.27	-0.02	0.18	-0.03	-0.00	0.10	0.25	0.14	-0.05	1.00	-0.19	-0.21	-0.11	-0.19	0.18	0.19	0.01	-0.00	0.01	0.25	0.15
hemo	-0.25	-0.28	0.68	-0.78	-0.39	-0.45	-0.73	-0.53	-0.41	-0.43	-0.71	-0.72		-0.19	1.00	0.86	-0.34	0.74	-0.75	-0.66	-0.38	0.62	-0.60	-0.64	-0.83
pcv h	-0.24	-0.35	0.68	-0.78	-0.40	-0.42	-0.72	-0.53	-0.40	-0.44	-0.71	-0.73	0.57	-0.21	0.86	1.00	-0.35	0.74	-0.75	-0.66	-0.38	0.63	-0.61	-0.66	-0.83
WC -	0.15	0.01	-0.29	0.31	0.20	0.11	0.17	0.15	0.17	0.21	0.13	0.12	-0.18	-0.11	-0.34	-0.35	1.00	-0.27	0.22	0.29	0.02	-0.33	0.28	0.14	0.41
된 -	-0.24	-0.23	0.62	-0.64	-0.38	-0.38	-0.67	-0.50	-0.34	-0.42	-0.62	-0.64	0.47	-0.19	0.74	0.74	-0.27	1.00	-0.67	-0.59	-0.36	0.56	-0.57	-0.58	-0.72
Ħ.	0.37	0.33	-0.65	0.80	0.58	0.44	0.67	0.43	0.31	0.58	0.62	0.66	-0.53	0.18	-0.75	-0.75	0.22	-0.67	1.00	0.77	0.52	-0.56	0.59	0.54	0.86
mb -	0.32	0.22	-0.64	0.68	0.59	0.51	0.64	0.32	0.37	0.66	0.57	0.57	-0.47	0.19	-0.66	-0.66	0.29	-0.59	0.77	1.00	0.46	-0.49	0.67	0.28	0.76
cad	0.27	0.26	-0.38	0.37	0.47	0.29	0.38	0.35	0.30	0.46	0.31	0.32	-0.22	0.01	-0.38	-0.38	0.02	-0.36	0.52	0.46	1.00	-0.13	0.20	0.24	0.45
appet	-0.17	-0.15	0.52	-0.58	-0.22	-0.42	-0.53	-0.43	-0.19	-0.34	-0.50	-0.51	0.49	-0.00	0.62	0.63	-0.33	0.56	-0.56	-0.49	-0.13	1.00	-0.62	-0.52	-0.60
97 Pa	0.23	0.12	-0.63	0.62	0.37	0.28	0.61	0.35	0.39	0.34	0.58	0.62	-0.47	0.01	-0.60	-0.61	0.28	-0.57	0.59	0.67	0.20	-0.62	1.00	0.38	0.62
ane	0.11	0.31	-0.41		0.18	0.21	0.55	0.49	0.14	0.14	0.65	0.66	-0.56	0.25	-0.64	-0.66	0.14	-0.58	0.54	0.28	0.24	-0.52	0.38	1.00	0.55
tion	0.31	0.33	-0.79	0.93	0.51	0.59	0.78	0.51	0.47	0.59	0.68	0.70	-0.64	0.15	-0.83	-0.83	0.41	-0.72	0.86	0.76	0.45	-0.60	0.62	0.55	1.00
dassification	age -	- dq	- ĝs	<u>-</u>	ĸ	- pp	Ä	- DCC	- gq	bgr -	B	Ŗ	- pos	pot -	hemo -	pcv -	WC -	5	Hth -	æ	cad -	appet -	å	ane -	dassification -
																									dassifi

df.corr()

- 0.75

0.50

0.25

0.00

- -0.25

- -0.50

-0.75

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	age	bp	sg	al	su	rbc	рс	рсс	ba	bgr	• • •	pcv	1
age	1.000000	0.079712	-0.277303	0.253380	0.207711	0.147971	0.188907	0.124032	0.068353	0.301915		-0.235116	0.1531
bp	0.079712	1.000000	-0.198897	0.322507	0.243828	0.316670	0.179834	0.206507	0.174555	0.190113		-0.353504	0.0082
sg	-0.277303	-0.198897	1.000000	-0.712331	-0.448477	-0.500494	-0.630323	-0.460050	-0.516392	-0.544781		0.678472	-0.2889
al	0.253380	0.322507	-0.712331	1.000000	0.521448	0.489941	0.752956	0.503341	0.516104	0.518123		-0.775528	0.3145
su	0.207711	0.243828	-0.448477	0.521448	1.000000	0.256568	0.335901	0.177327	0.381929	0.730050		-0.404821	0.2010
rbc	0.147971	0.316670	-0.500494	0.489941	0.256568	1.000000	0.498959	0.168592	0.273177	0.493857		-0.422537	0.1088
рс	0.188907	0.179834	-0.630323	0.752956	0.335901	0.498959	1.000000	0.600092	0.481227	0.430646		-0.718042	0.1699
рсс	0.124032	0.206507	-0.460050	0.503341	0.177327	0.168592	0.600092	1.000000	0.415033	0.257768		-0.534564	0.1467
ba	0.068353	0.174555	-0.516392	0.516104	0.381929	0.273177	0.481227	0.415033	1.000000	0.318095		-0.397500	0.1700
bgr	0.301915	0.190113	-0.544781	0.518123	0.730050	0.493857	0.430646	0.257768	0.318095	1.000000		-0.443818	0.2120!
bu	0.190636	0.316287	-0.545319	0.661940	0.312259	0.378478	0.613318	0.366726	0.205351	0.326496		-0.706582	0.1289
sc	0.189721	0.386551	-0.563122	0.702889	0.347196	0.410408	0.588517	0.361965	0.229238	0.331284		-0.726187	0.1239
sod	-0.102933	-0.224710	0.539285	-0.599334	-0.242491	-0.344916	-0.520324	-0.473954	-0.221374	-0.284968		0.570045	-0.1762
pot	0.006866	0.127801	-0.075057	0.209492	0.271954	-0.019319	0.176150	-0.030297	-0.000279	0.102226		-0.213488	-0.1075
hemo	-0.245645	-0.282365	0.682086	-0.784745	-0.385511	-0.452566	-0.733140	-0.531182	-0.410353	-0.434158		0.856775	-0.3374
pcv	-0.235116	-0.353504	0.678472	-0.775528	-0.404821	-0.422537	-0.718042	-0.534564	-0.397500	-0.443818		1.000000	-0.3496
wc	0.153132	0.008274	-0.288930	0.314574	0.201000	0.108857	0.169936	0.146742	0.170071	0.212093		-0.349607	1.0000
rc	-0.242235	-0.228533	0.619092	-0.640099	-0.377726	-0.379378	-0.667113	-0.499401	-0.343299	-0.418085		0.739019	-0.2723
htn	0.372348	0.334951	-0.648168	0.796876	0.577286	0.442400	0.666767	0.432876	0.314961	0.579407		-0.752043	0.2239
dm	0.323957	0.218096	-0.639391	0.678582	0.591010	0.511777	0.636288	0.321900	0.367477	0.663012		-0.655039	0.2870
cad	0.269868	0.257709	-0.379305	0.374755	0.466658	0.293269	0.384223	0.352255	0.297063	0.459164		-0.375627	0.0212
appet	-0.170259	-0.145047	0.523944	-0.578080	-0.220547	-0.418639	-0.528435	-0.432515	-0.187815	-0.338924		0.629102	-0.3287
pe	0.232327	0.117878	-0.633622	0.622268	0.374128	0.282868	0.606234	0.350171	0.393819	0.336141		-0.606829	0.2826
ane	0.105809	0.311097	-0.413252	0.569529	0.179811	0.209797	0.545380	0.485941	0.141344	0.139854		-0.655724	0.1392
classification	0.305119	0.326567	-0.790102	0.925816	0.510615	0.586391	0.775388	0.509915	0.468845	0.591217		-0.827983	0.4075
25 rows × 25 col	umns												