STATISTICAL DISCRIPTION

```
# Aim: To Perform Statistical Description on Data
#Name: Achal V Chandure
#RolL no. :08
#Sub : ET1
#section:3C
#Date:26/07/2024
import pandas as pd
import os
os.getcwd()
'C:\\Users\\HP'
os.chdir("C:\\Users\\HP\\Desktop")
data=pd.read csv("framingham.csv")
data.head()
  male age education currentSmoker cigsPerDay BPMeds
prevalentStroke \
  1 39
                   4.0
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  0 46
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1
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   prevalentHyp diabetes totChol sysBP diaBP BMI heartRate
glucose \
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                                                             80.0
77.0
                            250.0 121.0 81.0 28.73
                                                             95.0
76.0
                       0 245.0 127.5 80.0 25.34
                                                             75.0
70.0
             1
                            225.0 150.0 95.0 28.58
                                                             65.0
103.0
             0
                            285.0 130.0
                                           84.0 23.10
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85.0
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4234	1	51		3.0		1		43.0	0.0	
4235	0			2.0		1		20.0	NaN	
4236	0			1.0		1		15.0	0.0	
4237	0			2.0		0		0.0	0.0	
4231	0	52		2.0		U		0.0	0.0	
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22.00										
4236			0		0		0	210.0	126.5	87.0
19.16										
4237			0		0		0	269.0	133.5	83.0
21.47										
	hear	tRate	glucos	e Ter	nYearCHD					
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9	1	43	1.0		1	30.0	0	.0	
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1 76.0		0	0	250.0	121.0	81.0	<u>?</u> 8.73	95.0	
2		0	0	245.0	127.5	80.0	25.34	75.0	
70.0		, and the second	, and the second	210.0	11,00	00.0	.0.01	, 0 • 0	
3		1	0	225.0	150.0	95.0	18.58	65.0	
103.0)	0	0	005.0	100 0	0.4.0		0.5.0	
4 85.0		0	0	285.0	130.0	84.0	23.10	85.0	
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99.0		_	, and the second	220.0	200.0		, , , ,	, , • •	
6		0	0	205.0	138.0	71.0	3.11	60.0	
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7 78.0		0	0	313.0	100.0	71.0	11.68	79.0	
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79.0		_	, and the second	200.0		03.0		, 0,0	
9		1	0	225.0	162.0	107.0	23.61	93.0	
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BMI \	_	LentS	troke pi	revalentHyp	diabet	ces	totChol	sysBP	diaBP
4228 43.67	\		0	1		1	260.0	190.0	130.0
4229 25.60			0	1		0	251.0	140.0	80.0
4230 22.89			0	1		0	268.0	170.0	102.0
4231 24.96			0	1		0	187.0	141.0	81.0
4232 23.14			0	1		0	176.0	168.0	97.0
4233 25.97			0	1		0	313.0	179.0	92.0
4234 19.71			0	0		0	207.0	126.5	80.0
4235 22.00			0	0		0	248.0	131.0	72.0
4236 19.16			0	0		0	210.0	126.5	87.0
4237 21.47			0	0		0	269.0	133.5	83.0
4228 4229 4230 4231 4232 4233 4234 4235 4236 4237		Rate 85.0 75.0 57.0 80.0 66.0 65.0 84.0 86.0	glucose 260.0 NaN NaN 81.0 79.0 86.0 68.0 86.0 NaN 107.0	TenYearCHD					
data.d	lescrib	e()							

	male	age	education	currentSmoke	r
cigsPerDa	ay \ 238.000000	4238.000000	4133.000000	4238.00000	0
4209.0000		4230.000000	4133.000000	4230.00000	O
mean 9.003089	0.429212	49.584946	1.978950	0.49410	1
std 11.920094	0.495022	8.572160	1.019791	0.50002	2.4
min	0.000000	32.000000	1.000000	0.00000	00
0.000000 25%	0.000000	42.000000	1.000000	0.00000	00
0.000000 50% 0.000000	0.000000	49.000000	2.000000	0.00000	00
75% 20.000000	1.000000	56.000000	3.000000	1.00000	00
max 70.000000	1.000000	70.000000	4.000000	1.00000	00
+ - + Oh - 1		prevalentStro	oke prevalent	Hyp diab	etes
	185.000000	4238.000	000 4238.00	0000 4238.00	0000
4188.0000 mean	0.029630	0.005	899 0.31	0524 0.02	5720
236.72158 std	0.169584	0.076	5587 0.46	2763 0.15	8316
44.590334 min	0.000000	0.000	0.00	0.00	0000
107.00000 25%	0.000000	0.000	0.00	0.00	0000
206.00000 50%	0.000000	0.000	0.00	0.00	0000
234.00000 75% 263.00000	0.000000	0.000	1.00	0.00	0000
max 696.00000	1.000000	1.000	0000 1.00	0000 1.00	0000
696.00000		1' DD	DMT	1 12 1	1
\	sysBP	diaBP	BMI	heartRate	glucose
count 42	238.000000	4238.000000	4219.000000	4237.000000	3850.000000
mean :	132.352407	82.893464	25.802008	75.878924	81.966753
std	22.038097	11.910850	4.080111	12.026596	23.959998
min	83.500000	48.000000	15.540000	44.000000	40.000000
25%	117.000000	75.000000	23.070000	68.000000	71.000000

50%	128.000000	82.000000	25.400000	75.000000	78.000000
75%	144.000000	89.875000	28.040000	83.00000	87.000000
max	295.000000	142.500000	56.800000	143.000000	394.000000
	Manyaa walib				
count	TenYearCHD 4238.000000				
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# 0 1 2 3 4 5 6 7 8 9	Column male age education currentSmoker cigsPerDay BPMeds prevalentStroke prevalentHyp diabetes totChol sysBP	Non-Null Could 4238 non-nul 4238 non-nul 4133 non-nul 4238 non-nul 4209 non-nul 4185 non-nul 4238 non-nul	1 int64 1 int64 1 float64 1 int64 1 float64 1 float64 1 int64 1 int64 1 int64 1 int64 1 float64		
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# 0 1 2 3 4 5 6 7 8 9 10 11 12	Column male age education currentSmoker cigsPerDay BPMeds prevalentStroke prevalentHyp diabetes totChol sysBP diaBP BMI	Non-Null Could 4238 non-nul 4238 non-nul 4133 non-nul 4238 non-nul 4209 non-nul 4238 non-nul 4239 non-nul	1 int64 1 int64 1 float64 1 float64 1 float64 1 float64 1 int64 1 int64 1 int64 1 int64 1 float64 1 float64 1 float64		
# 0 1 2 3 4 5 6 7 8 9 10 11 12 13	Column male age education currentSmoker cigsPerDay BPMeds prevalentStroke prevalentHyp diabetes totChol sysBP diaBP BMI heartRate	Non-Null Could 4238 non-nul 4238 non-nul 4133 non-nul 4238 non-nul 4209 non-nul 4185 non-nul 4238 non-nul 4237 non-nul	1 int64 1 int64 1 float64 1 int64 1 float64 1 float64 1 int64 1 int64 1 int64 1 int64 1 float64 1 float64 1 float64 1 float64		
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data.shape

(4238, 16)