

R Notebook

setwd("C:/Users/User/AppData/Local/Temp/RtmpeK020J/downloaded_packages") This is an R Markdown Notebook. When you execute code within the notebook, the results appear beneath the code.

Try executing this chunk by clicking the *Run* button within the chunk or by placing your cursor inside it and pressing *Ctrl+Shift+Enter*.

```
rmarkdown::render(input = "Assignment1.Rmd", output_format = "pdf_document", output_file = "Assignment1.pdf")
```

```
devtools::install_version("rmarkdown", version = "1.8", repos = "http://cran.us.r-project.org")
```

This is an R Markdown Notebook. When you execute code within the notebook, the results appear beneath the code.

Try executing this chunk by clicking the *Run* button within the chunk or by placing your cursor inside it and pressing *Ctrl+Shift+Enter*.

```
#setting the working directory
setwd("/Users/User/Dropbox/PC/Desktop/Deepak/Machine Learning/Assignments")
getwd()
```

```
## [1] "C:/Users/User/Dropbox/PC/Desktop/Deepak/Machine Learning/Assignments"
```

```
#reading the drug200.csv data
drug_data <- read.csv("drug200.csv")
drug_data
```

##	Age	Sex	BP	Cholesterol	Na_to_K	Drug
## 1	23	F	HIGH	HIGH	25.355	DrugY
## 2	47	M	LOW	HIGH	13.093	drugC
## 3	47	M	LOW	HIGH	10.114	drugC
## 4	28	F	NORMAL	HIGH	7.798	drugX
## 5	61	F	LOW	HIGH	18.043	DrugY
## 6	22	F	NORMAL	HIGH	8.607	drugX
## 7	49	F	NORMAL	HIGH	16.275	DrugY
## 8	41	M	LOW	HIGH	11.037	drugC
## 9	60	M	NORMAL	HIGH	15.171	DrugY
## 10	43	M	LOW	NORMAL	19.368	DrugY
## 11	47	F	LOW	HIGH	11.767	drugC
## 12	34	F	HIGH	NORMAL	19.199	DrugY
## 13	43	M	LOW	HIGH	15.376	DrugY
## 14	74	F	LOW	HIGH	20.942	DrugY
## 15	50	F	NORMAL	HIGH	12.703	drugX
## 16	16	F	HIGH	NORMAL	15.516	DrugY
## 17	69	M	LOW	NORMAL	11.455	drugX
## 18	43	M	HIGH	HIGH	13.972	drugA
## 19	23	M	LOW	HIGH	7.298	drugC

##	20	32	F	HIGH	NORMAL	25.974	DrugY
##	21	57	M	LOW	NORMAL	19.128	DrugY
##	22	63	M	NORMAL	HIGH	25.917	DrugY
##	23	47	M	LOW	NORMAL	30.568	DrugY
##	24	48	F	LOW	HIGH	15.036	DrugY
##	25	33	F	LOW	HIGH	33.486	DrugY
##	26	28	F	HIGH	NORMAL	18.809	DrugY
##	27	31	M	HIGH	HIGH	30.366	DrugY
##	28	49	F	NORMAL	NORMAL	9.381	drugX
##	29	39	F	LOW	NORMAL	22.697	DrugY
##	30	45	M	LOW	HIGH	17.951	DrugY
##	31	18	F	NORMAL	NORMAL	8.750	drugX
##	32	74	M	HIGH	HIGH	9.567	drugB
##	33	49	M	LOW	NORMAL	11.014	drugX
##	34	65	F	HIGH	NORMAL	31.876	DrugY
##	35	53	M	NORMAL	HIGH	14.133	drugX
##	36	46	M	NORMAL	NORMAL	7.285	drugX
##	37	32	M	HIGH	NORMAL	9.445	drugA
##	38	39	M	LOW	NORMAL	13.938	drugX
##	39	39	F	NORMAL	NORMAL	9.709	drugX
##	40	15	M	NORMAL	HIGH	9.084	drugX
##	41	73	F	NORMAL	HIGH	19.221	DrugY
##	42	58	F	HIGH	NORMAL	14.239	drugB
##	43	50	M	NORMAL	NORMAL	15.790	DrugY
##	44	23	M	NORMAL	HIGH	12.260	drugX
##	45	50	F	NORMAL	NORMAL	12.295	drugX
##	46	66	F	NORMAL	NORMAL	8.107	drugX
##	47	37	F	HIGH	HIGH	13.091	drugA
##	48	68	M	LOW	HIGH	10.291	drugC
##	49	23	M	NORMAL	HIGH	31.686	DrugY
##	50	28	F	LOW	HIGH	19.796	DrugY
##	51	58	F	HIGH	HIGH	19.416	DrugY
##	52	67	M	NORMAL	NORMAL	10.898	drugX
##	53	62	M	LOW	NORMAL	27.183	DrugY
##	54	24	F	HIGH	NORMAL	18.457	DrugY
##	55	68	F	HIGH	NORMAL	10.189	drugB
##	56	26	F	LOW	HIGH	14.160	drugC
##	57	65	M	HIGH	NORMAL	11.340	drugB
##	58	40	M	HIGH	HIGH	27.826	DrugY
##	59	60	M	NORMAL	NORMAL	10.091	drugX
##	60	34	M	HIGH	HIGH	18.703	DrugY
##	61	38	F	LOW	NORMAL	29.875	DrugY
##	62	24	M	HIGH	NORMAL	9.475	drugA
##	63	67	M	LOW	NORMAL	20.693	DrugY
##	64	45	M	LOW	NORMAL	8.370	drugX
##	65	60	F	HIGH	HIGH	13.303	drugB
##	66	68	F	NORMAL	NORMAL	27.050	DrugY
##	67	29	M	HIGH	HIGH	12.856	drugA
##	68	17	M	NORMAL	NORMAL	10.832	drugX
##	69	54	M	NORMAL	HIGH	24.658	DrugY
##	70	18	F	HIGH	NORMAL	24.276	DrugY
##	71	70	M	HIGH	HIGH	13.967	drugB
##	72	28	F	NORMAL	HIGH	19.675	DrugY
##	73	24	F	NORMAL	HIGH	10.605	drugX

## 74	41	F	NORMAL	NORMAL	22.905	DrugY
## 75	31	M	HIGH	NORMAL	17.069	DrugY
## 76	26	M	LOW	NORMAL	20.909	DrugY
## 77	36	F	HIGH	HIGH	11.198	drugA
## 78	26	F	HIGH	NORMAL	19.161	DrugY
## 79	19	F	HIGH	HIGH	13.313	drugA
## 80	32	F	LOW	NORMAL	10.840	drugX
## 81	60	M	HIGH	HIGH	13.934	drugB
## 82	64	M	NORMAL	HIGH	7.761	drugX
## 83	32	F	LOW	HIGH	9.712	drugC
## 84	38	F	HIGH	NORMAL	11.326	drugA
## 85	47	F	LOW	HIGH	10.067	drugC
## 86	59	M	HIGH	HIGH	13.935	drugB
## 87	51	F	NORMAL	HIGH	13.597	drugX
## 88	69	M	LOW	HIGH	15.478	DrugY
## 89	37	F	HIGH	NORMAL	23.091	DrugY
## 90	50	F	NORMAL	NORMAL	17.211	DrugY
## 91	62	M	NORMAL	HIGH	16.594	DrugY
## 92	41	M	HIGH	NORMAL	15.156	DrugY
## 93	29	F	HIGH	HIGH	29.450	DrugY
## 94	42	F	LOW	NORMAL	29.271	DrugY
## 95	56	M	LOW	HIGH	15.015	DrugY
## 96	36	M	LOW	NORMAL	11.424	drugX
## 97	58	F	LOW	HIGH	38.247	DrugY
## 98	56	F	HIGH	HIGH	25.395	DrugY
## 99	20	M	HIGH	NORMAL	35.639	DrugY
## 100	15	F	HIGH	NORMAL	16.725	DrugY
## 101	31	M	HIGH	NORMAL	11.871	drugA
## 102	45	F	HIGH	HIGH	12.854	drugA
## 103	28	F	LOW	HIGH	13.127	drugC
## 104	56	M	NORMAL	HIGH	8.966	drugX
## 105	22	M	HIGH	NORMAL	28.294	DrugY
## 106	37	M	LOW	NORMAL	8.968	drugX
## 107	22	M	NORMAL	HIGH	11.953	drugX
## 108	42	M	LOW	HIGH	20.013	DrugY
## 109	72	M	HIGH	NORMAL	9.677	drugB
## 110	23	M	NORMAL	HIGH	16.850	DrugY
## 111	50	M	HIGH	HIGH	7.490	drugA
## 112	47	F	NORMAL	NORMAL	6.683	drugX
## 113	35	M	LOW	NORMAL	9.170	drugX
## 114	65	F	LOW	NORMAL	13.769	drugX
## 115	20	F	NORMAL	NORMAL	9.281	drugX
## 116	51	M	HIGH	HIGH	18.295	DrugY
## 117	67	M	NORMAL	NORMAL	9.514	drugX
## 118	40	F	NORMAL	HIGH	10.103	drugX
## 119	32	F	HIGH	NORMAL	10.292	drugA
## 120	61	F	HIGH	HIGH	25.475	DrugY
## 121	28	M	NORMAL	HIGH	27.064	DrugY
## 122	15	M	HIGH	NORMAL	17.206	DrugY
## 123	34	M	NORMAL	HIGH	22.456	DrugY
## 124	36	F	NORMAL	HIGH	16.753	DrugY
## 125	53	F	HIGH	NORMAL	12.495	drugB
## 126	19	F	HIGH	NORMAL	25.969	DrugY
## 127	66	M	HIGH	HIGH	16.347	DrugY

##	128	35	M	NORMAL	NORMAL	7.845	drugX
##	129	47	M	LOW	NORMAL	33.542	DrugY
##	130	32	F	NORMAL	HIGH	7.477	drugX
##	131	70	F	NORMAL	HIGH	20.489	DrugY
##	132	52	M	LOW	NORMAL	32.922	DrugY
##	133	49	M	LOW	NORMAL	13.598	drugX
##	134	24	M	NORMAL	HIGH	25.786	DrugY
##	135	42	F	HIGH	HIGH	21.036	DrugY
##	136	74	M	LOW	NORMAL	11.939	drugX
##	137	55	F	HIGH	HIGH	10.977	drugB
##	138	35	F	HIGH	HIGH	12.894	drugA
##	139	51	M	HIGH	NORMAL	11.343	drugB
##	140	69	F	NORMAL	HIGH	10.065	drugX
##	141	49	M	HIGH	NORMAL	6.269	drugA
##	142	64	F	LOW	NORMAL	25.741	DrugY
##	143	60	M	HIGH	NORMAL	8.621	drugB
##	144	74	M	HIGH	NORMAL	15.436	DrugY
##	145	39	M	HIGH	HIGH	9.664	drugA
##	146	61	M	NORMAL	HIGH	9.443	drugX
##	147	37	F	LOW	NORMAL	12.006	drugX
##	148	26	F	HIGH	NORMAL	12.307	drugA
##	149	61	F	LOW	NORMAL	7.340	drugX
##	150	22	M	LOW	HIGH	8.151	drugC
##	151	49	M	HIGH	NORMAL	8.700	drugA
##	152	68	M	HIGH	HIGH	11.009	drugB
##	153	55	M	NORMAL	NORMAL	7.261	drugX
##	154	72	F	LOW	NORMAL	14.642	drugX
##	155	37	M	LOW	NORMAL	16.724	DrugY
##	156	49	M	LOW	HIGH	10.537	drugC
##	157	31	M	HIGH	NORMAL	11.227	drugA
##	158	53	M	LOW	HIGH	22.963	DrugY
##	159	59	F	LOW	HIGH	10.444	drugC
##	160	34	F	LOW	NORMAL	12.923	drugX
##	161	30	F	NORMAL	HIGH	10.443	drugX
##	162	57	F	HIGH	NORMAL	9.945	drugB
##	163	43	M	NORMAL	NORMAL	12.859	drugX
##	164	21	F	HIGH	NORMAL	28.632	DrugY
##	165	16	M	HIGH	NORMAL	19.007	DrugY
##	166	38	M	LOW	HIGH	18.295	DrugY
##	167	58	F	LOW	HIGH	26.645	DrugY
##	168	57	F	NORMAL	HIGH	14.216	drugX
##	169	51	F	LOW	NORMAL	23.003	DrugY
##	170	20	F	HIGH	HIGH	11.262	drugA
##	171	28	F	NORMAL	HIGH	12.879	drugX
##	172	45	M	LOW	NORMAL	10.017	drugX
##	173	39	F	NORMAL	NORMAL	17.225	DrugY
##	174	41	F	LOW	NORMAL	18.739	DrugY
##	175	42	M	HIGH	NORMAL	12.766	drugA
##	176	73	F	HIGH	HIGH	18.348	DrugY
##	177	48	M	HIGH	NORMAL	10.446	drugA
##	178	25	M	NORMAL	HIGH	19.011	DrugY
##	179	39	M	NORMAL	HIGH	15.969	DrugY
##	180	67	F	NORMAL	HIGH	15.891	DrugY
##	181	22	F	HIGH	NORMAL	22.818	DrugY

```
## 182 59 F NORMAL HIGH 13.884 drugX
## 183 20 F LOW NORMAL 11.686 drugX
## 184 36 F HIGH NORMAL 15.490 DrugY
## 185 18 F HIGH HIGH 37.188 DrugY
## 186 57 F NORMAL NORMAL 25.893 DrugY
## 187 70 M HIGH HIGH 9.849 drugB
## 188 47 M HIGH HIGH 10.403 drugA
## 189 65 M HIGH NORMAL 34.997 DrugY
## 190 64 M HIGH NORMAL 20.932 DrugY
## 191 58 M HIGH HIGH 18.991 DrugY
## 192 23 M HIGH HIGH 8.011 drugA
## 193 72 M LOW HIGH 16.310 DrugY
## 194 72 M LOW HIGH 6.769 drugC
## 195 46 F HIGH HIGH 34.686 DrugY
## 196 56 F LOW HIGH 11.567 drugC
## 197 16 M LOW HIGH 12.006 drugC
## 198 52 M NORMAL HIGH 9.894 drugX
## 199 23 M NORMAL NORMAL 14.020 drugX
## 200 40 F LOW NORMAL 11.349 drugX
```

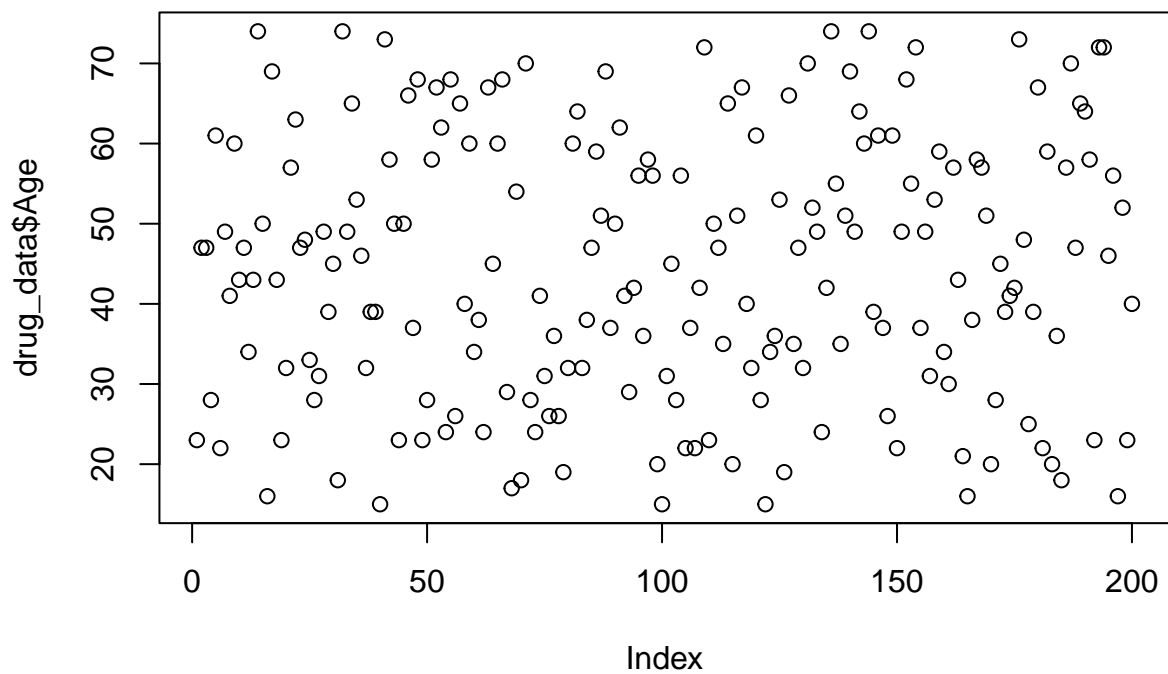
```
#statistics from the data
summary(drug_data)
```

```
##      Age           Sex           BP           Cholesterol
## Min.   :15.00   Length:200   Length:200   Length:200
## 1st Qu.:31.00   Class :character Class :character Class :character
## Median :45.00   Mode  :character Mode  :character Mode  :character
## Mean   :44.31
## 3rd Qu.:58.00
## Max.   :74.00
##      Na_to_K      Drug
## Min.   : 6.269   Length:200
## 1st Qu.:10.445   Class :character
## Median :13.937   Mode  :character
## Mean   :16.084
## 3rd Qu.:19.380
## Max.   :38.247
```

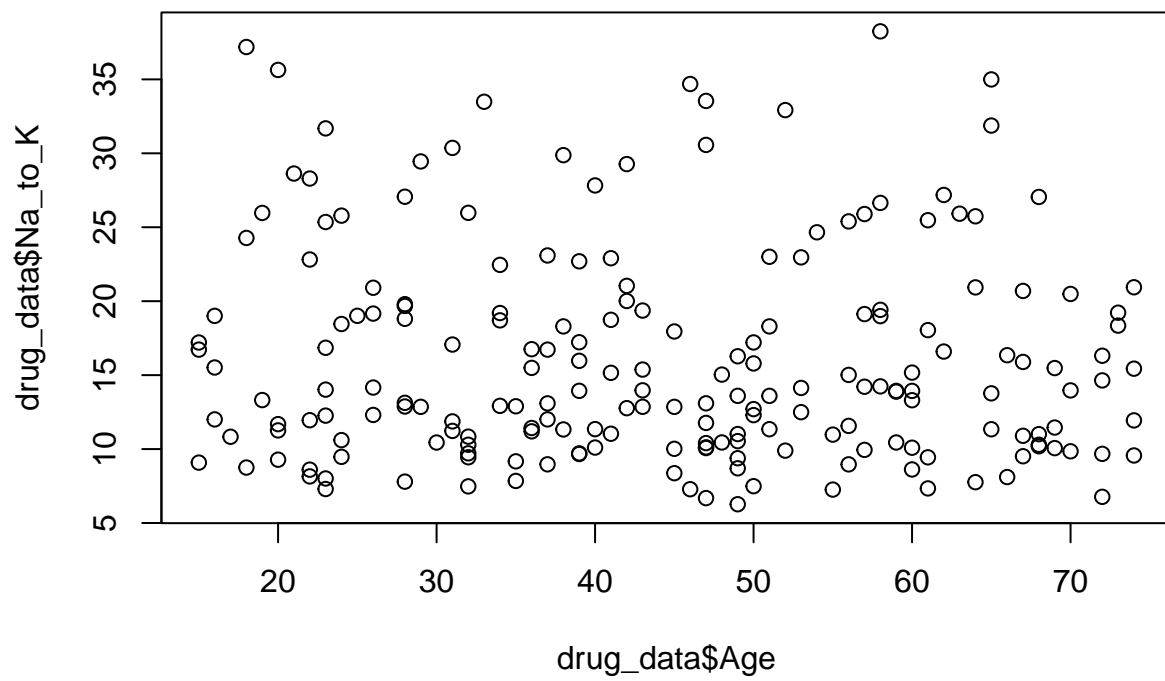
```
#structure of Data
str(drug_data)
```

```
## 'data.frame':   200 obs. of  6 variables:
## $ Age          : int  23 47 47 28 61 22 49 41 60 43 ...
## $ Sex          : chr  "F" "M" "M" "F" ...
## $ BP          : chr  "HIGH" "LOW" "LOW" "NORMAL" ...
## $ Cholesterol : chr  "HIGH" "HIGH" "HIGH" "HIGH" ...
## $ Na_to_K     : num  25.4 13.1 10.1 7.8 18 ...
## $ Drug        : chr  "DrugY" "drugC" "drugC" "drugX" ...
```

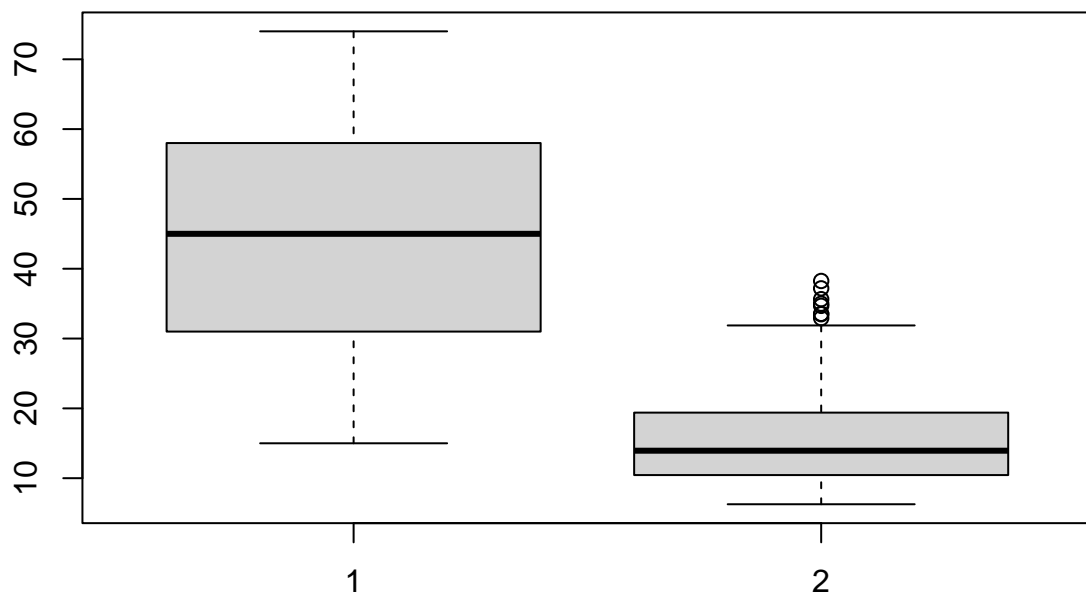
```
#plotting the drug field
plot(drug_data$Age)
```



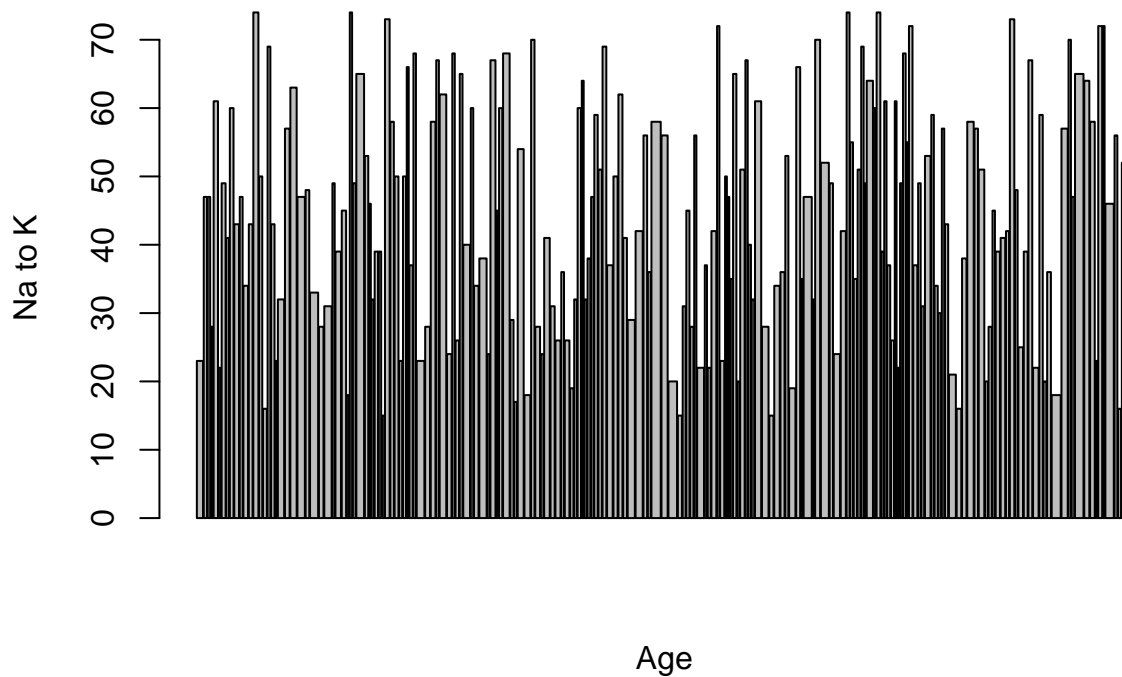
```
plot(drug_data$Age,drug_data$Na_to_K)
```



```
boxplot(drug_data$Age,drug_data$Na_to_K)
```



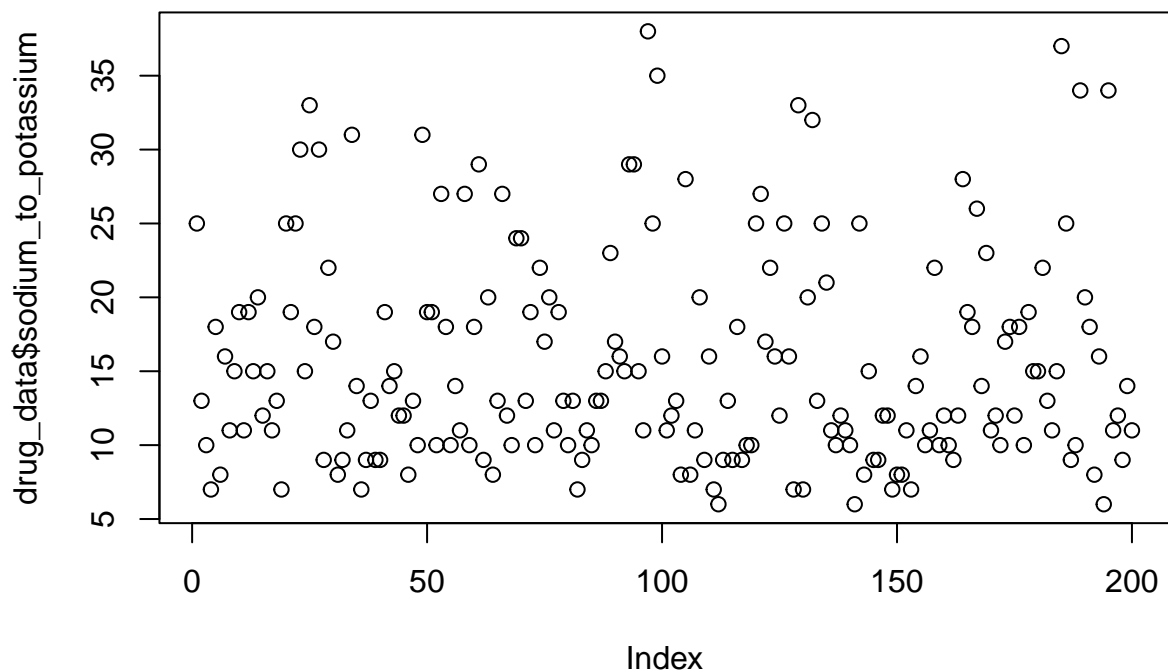
```
barplot(drug_data$Age,drug_data$Na_to_K,xlab="Age",ylab="Na to K")
```

```
#transforming: Converting the values of Na_to_k to nearest integers using floor function and storing it  
Na_to_k <- drug_data$Na_to_K  
typeof(Na_to_k)
```

```
## [1] "double"
```

```
Sodium_to_potassium=floor(Na_to_k)  
drug_data$sodium_to_potassium = Sodium_to_potassium  
#plotting the transformed data field  
plot(drug_data$sodium_to_potassium)
```



```
drug_data
```

##	Age	Sex	BP	Cholesterol	Na_to_K	Drug	sodium_to_potassium
## 1	23	F	HIGH	HIGH	25.355	DrugY	25
## 2	47	M	LOW	HIGH	13.093	drugC	13
## 3	47	M	LOW	HIGH	10.114	drugC	10
## 4	28	F	NORMAL	HIGH	7.798	drugX	7
## 5	61	F	LOW	HIGH	18.043	DrugY	18
## 6	22	F	NORMAL	HIGH	8.607	drugX	8
## 7	49	F	NORMAL	HIGH	16.275	DrugY	16
## 8	41	M	LOW	HIGH	11.037	drugC	11
## 9	60	M	NORMAL	HIGH	15.171	DrugY	15
## 10	43	M	LOW	NORMAL	19.368	DrugY	19
## 11	47	F	LOW	HIGH	11.767	drugC	11
## 12	34	F	HIGH	NORMAL	19.199	DrugY	19
## 13	43	M	LOW	HIGH	15.376	DrugY	15
## 14	74	F	LOW	HIGH	20.942	DrugY	20
## 15	50	F	NORMAL	HIGH	12.703	drugX	12
## 16	16	F	HIGH	NORMAL	15.516	DrugY	15
## 17	69	M	LOW	NORMAL	11.455	drugX	11
## 18	43	M	HIGH	HIGH	13.972	drugA	13
## 19	23	M	LOW	HIGH	7.298	drugC	7
## 20	32	F	HIGH	NORMAL	25.974	DrugY	25
## 21	57	M	LOW	NORMAL	19.128	DrugY	19
## 22	63	M	NORMAL	HIGH	25.917	DrugY	25
## 23	47	M	LOW	NORMAL	30.568	DrugY	30

## 24	48	F	LOW	HIGH	15.036	DrugY	15
## 25	33	F	LOW	HIGH	33.486	DrugY	33
## 26	28	F	HIGH	NORMAL	18.809	DrugY	18
## 27	31	M	HIGH	HIGH	30.366	DrugY	30
## 28	49	F	NORMAL	NORMAL	9.381	drugX	9
## 29	39	F	LOW	NORMAL	22.697	DrugY	22
## 30	45	M	LOW	HIGH	17.951	DrugY	17
## 31	18	F	NORMAL	NORMAL	8.750	drugX	8
## 32	74	M	HIGH	HIGH	9.567	drugB	9
## 33	49	M	LOW	NORMAL	11.014	drugX	11
## 34	65	F	HIGH	NORMAL	31.876	DrugY	31
## 35	53	M	NORMAL	HIGH	14.133	drugX	14
## 36	46	M	NORMAL	NORMAL	7.285	drugX	7
## 37	32	M	HIGH	NORMAL	9.445	drugA	9
## 38	39	M	LOW	NORMAL	13.938	drugX	13
## 39	39	F	NORMAL	NORMAL	9.709	drugX	9
## 40	15	M	NORMAL	HIGH	9.084	drugX	9
## 41	73	F	NORMAL	HIGH	19.221	DrugY	19
## 42	58	F	HIGH	NORMAL	14.239	drugB	14
## 43	50	M	NORMAL	NORMAL	15.790	DrugY	15
## 44	23	M	NORMAL	HIGH	12.260	drugX	12
## 45	50	F	NORMAL	NORMAL	12.295	drugX	12
## 46	66	F	NORMAL	NORMAL	8.107	drugX	8
## 47	37	F	HIGH	HIGH	13.091	drugA	13
## 48	68	M	LOW	HIGH	10.291	drugC	10
## 49	23	M	NORMAL	HIGH	31.686	DrugY	31
## 50	28	F	LOW	HIGH	19.796	DrugY	19
## 51	58	F	HIGH	HIGH	19.416	DrugY	19
## 52	67	M	NORMAL	NORMAL	10.898	drugX	10
## 53	62	M	LOW	NORMAL	27.183	DrugY	27
## 54	24	F	HIGH	NORMAL	18.457	DrugY	18
## 55	68	F	HIGH	NORMAL	10.189	drugB	10
## 56	26	F	LOW	HIGH	14.160	drugC	14
## 57	65	M	HIGH	NORMAL	11.340	drugB	11
## 58	40	M	HIGH	HIGH	27.826	DrugY	27
## 59	60	M	NORMAL	NORMAL	10.091	drugX	10
## 60	34	M	HIGH	HIGH	18.703	DrugY	18
## 61	38	F	LOW	NORMAL	29.875	DrugY	29
## 62	24	M	HIGH	NORMAL	9.475	drugA	9
## 63	67	M	LOW	NORMAL	20.693	DrugY	20
## 64	45	M	LOW	NORMAL	8.370	drugX	8
## 65	60	F	HIGH	HIGH	13.303	drugB	13
## 66	68	F	NORMAL	NORMAL	27.050	DrugY	27
## 67	29	M	HIGH	HIGH	12.856	drugA	12
## 68	17	M	NORMAL	NORMAL	10.832	drugX	10
## 69	54	M	NORMAL	HIGH	24.658	DrugY	24
## 70	18	F	HIGH	NORMAL	24.276	DrugY	24
## 71	70	M	HIGH	HIGH	13.967	drugB	13
## 72	28	F	NORMAL	HIGH	19.675	DrugY	19
## 73	24	F	NORMAL	HIGH	10.605	drugX	10
## 74	41	F	NORMAL	NORMAL	22.905	DrugY	22
## 75	31	M	HIGH	NORMAL	17.069	DrugY	17
## 76	26	M	LOW	NORMAL	20.909	DrugY	20
## 77	36	F	HIGH	HIGH	11.198	drugA	11

## 78	26	F	HIGH	NORMAL	19.161	DrugY	19
## 79	19	F	HIGH	HIGH	13.313	drugA	13
## 80	32	F	LOW	NORMAL	10.840	drugX	10
## 81	60	M	HIGH	HIGH	13.934	drugB	13
## 82	64	M	NORMAL	HIGH	7.761	drugX	7
## 83	32	F	LOW	HIGH	9.712	drugC	9
## 84	38	F	HIGH	NORMAL	11.326	drugA	11
## 85	47	F	LOW	HIGH	10.067	drugC	10
## 86	59	M	HIGH	HIGH	13.935	drugB	13
## 87	51	F	NORMAL	HIGH	13.597	drugX	13
## 88	69	M	LOW	HIGH	15.478	DrugY	15
## 89	37	F	HIGH	NORMAL	23.091	DrugY	23
## 90	50	F	NORMAL	NORMAL	17.211	DrugY	17
## 91	62	M	NORMAL	HIGH	16.594	DrugY	16
## 92	41	M	HIGH	NORMAL	15.156	DrugY	15
## 93	29	F	HIGH	HIGH	29.450	DrugY	29
## 94	42	F	LOW	NORMAL	29.271	DrugY	29
## 95	56	M	LOW	HIGH	15.015	DrugY	15
## 96	36	M	LOW	NORMAL	11.424	drugX	11
## 97	58	F	LOW	HIGH	38.247	DrugY	38
## 98	56	F	HIGH	HIGH	25.395	DrugY	25
## 99	20	M	HIGH	NORMAL	35.639	DrugY	35
## 100	15	F	HIGH	NORMAL	16.725	DrugY	16
## 101	31	M	HIGH	NORMAL	11.871	drugA	11
## 102	45	F	HIGH	HIGH	12.854	drugA	12
## 103	28	F	LOW	HIGH	13.127	drugC	13
## 104	56	M	NORMAL	HIGH	8.966	drugX	8
## 105	22	M	HIGH	NORMAL	28.294	DrugY	28
## 106	37	M	LOW	NORMAL	8.968	drugX	8
## 107	22	M	NORMAL	HIGH	11.953	drugX	11
## 108	42	M	LOW	HIGH	20.013	DrugY	20
## 109	72	M	HIGH	NORMAL	9.677	drugB	9
## 110	23	M	NORMAL	HIGH	16.850	DrugY	16
## 111	50	M	HIGH	HIGH	7.490	drugA	7
## 112	47	F	NORMAL	NORMAL	6.683	drugX	6
## 113	35	M	LOW	NORMAL	9.170	drugX	9
## 114	65	F	LOW	NORMAL	13.769	drugX	13
## 115	20	F	NORMAL	NORMAL	9.281	drugX	9
## 116	51	M	HIGH	HIGH	18.295	DrugY	18
## 117	67	M	NORMAL	NORMAL	9.514	drugX	9
## 118	40	F	NORMAL	HIGH	10.103	drugX	10
## 119	32	F	HIGH	NORMAL	10.292	drugA	10
## 120	61	F	HIGH	HIGH	25.475	DrugY	25
## 121	28	M	NORMAL	HIGH	27.064	DrugY	27
## 122	15	M	HIGH	NORMAL	17.206	DrugY	17
## 123	34	M	NORMAL	HIGH	22.456	DrugY	22
## 124	36	F	NORMAL	HIGH	16.753	DrugY	16
## 125	53	F	HIGH	NORMAL	12.495	drugB	12
## 126	19	F	HIGH	NORMAL	25.969	DrugY	25
## 127	66	M	HIGH	HIGH	16.347	DrugY	16
## 128	35	M	NORMAL	NORMAL	7.845	drugX	7
## 129	47	M	LOW	NORMAL	33.542	DrugY	33
## 130	32	F	NORMAL	HIGH	7.477	drugX	7
## 131	70	F	NORMAL	HIGH	20.489	DrugY	20

##	132	52	M	LOW	NORMAL	32.922	DrugY	32
##	133	49	M	LOW	NORMAL	13.598	drugX	13
##	134	24	M	NORMAL	HIGH	25.786	DrugY	25
##	135	42	F	HIGH	HIGH	21.036	DrugY	21
##	136	74	M	LOW	NORMAL	11.939	drugX	11
##	137	55	F	HIGH	HIGH	10.977	drugB	10
##	138	35	F	HIGH	HIGH	12.894	drugA	12
##	139	51	M	HIGH	NORMAL	11.343	drugB	11
##	140	69	F	NORMAL	HIGH	10.065	drugX	10
##	141	49	M	HIGH	NORMAL	6.269	drugA	6
##	142	64	F	LOW	NORMAL	25.741	DrugY	25
##	143	60	M	HIGH	NORMAL	8.621	drugB	8
##	144	74	M	HIGH	NORMAL	15.436	DrugY	15
##	145	39	M	HIGH	HIGH	9.664	drugA	9
##	146	61	M	NORMAL	HIGH	9.443	drugX	9
##	147	37	F	LOW	NORMAL	12.006	drugX	12
##	148	26	F	HIGH	NORMAL	12.307	drugA	12
##	149	61	F	LOW	NORMAL	7.340	drugX	7
##	150	22	M	LOW	HIGH	8.151	drugC	8
##	151	49	M	HIGH	NORMAL	8.700	drugA	8
##	152	68	M	HIGH	HIGH	11.009	drugB	11
##	153	55	M	NORMAL	NORMAL	7.261	drugX	7
##	154	72	F	LOW	NORMAL	14.642	drugX	14
##	155	37	M	LOW	NORMAL	16.724	DrugY	16
##	156	49	M	LOW	HIGH	10.537	drugC	10
##	157	31	M	HIGH	NORMAL	11.227	drugA	11
##	158	53	M	LOW	HIGH	22.963	DrugY	22
##	159	59	F	LOW	HIGH	10.444	drugC	10
##	160	34	F	LOW	NORMAL	12.923	drugX	12
##	161	30	F	NORMAL	HIGH	10.443	drugX	10
##	162	57	F	HIGH	NORMAL	9.945	drugB	9
##	163	43	M	NORMAL	NORMAL	12.859	drugX	12
##	164	21	F	HIGH	NORMAL	28.632	DrugY	28
##	165	16	M	HIGH	NORMAL	19.007	DrugY	19
##	166	38	M	LOW	HIGH	18.295	DrugY	18
##	167	58	F	LOW	HIGH	26.645	DrugY	26
##	168	57	F	NORMAL	HIGH	14.216	drugX	14
##	169	51	F	LOW	NORMAL	23.003	DrugY	23
##	170	20	F	HIGH	HIGH	11.262	drugA	11
##	171	28	F	NORMAL	HIGH	12.879	drugX	12
##	172	45	M	LOW	NORMAL	10.017	drugX	10
##	173	39	F	NORMAL	NORMAL	17.225	DrugY	17
##	174	41	F	LOW	NORMAL	18.739	DrugY	18
##	175	42	M	HIGH	NORMAL	12.766	drugA	12
##	176	73	F	HIGH	HIGH	18.348	DrugY	18
##	177	48	M	HIGH	NORMAL	10.446	drugA	10
##	178	25	M	NORMAL	HIGH	19.011	DrugY	19
##	179	39	M	NORMAL	HIGH	15.969	DrugY	15
##	180	67	F	NORMAL	HIGH	15.891	DrugY	15
##	181	22	F	HIGH	NORMAL	22.818	DrugY	22
##	182	59	F	NORMAL	HIGH	13.884	drugX	13
##	183	20	F	LOW	NORMAL	11.686	drugX	11
##	184	36	F	HIGH	NORMAL	15.490	DrugY	15
##	185	18	F	HIGH	HIGH	37.188	DrugY	37

##	186	57	F	NORMAL	NORMAL	25.893	DrugY	25
##	187	70	M	HIGH	HIGH	9.849	drugB	9
##	188	47	M	HIGH	HIGH	10.403	drugA	10
##	189	65	M	HIGH	NORMAL	34.997	DrugY	34
##	190	64	M	HIGH	NORMAL	20.932	DrugY	20
##	191	58	M	HIGH	HIGH	18.991	DrugY	18
##	192	23	M	HIGH	HIGH	8.011	drugA	8
##	193	72	M	LOW	HIGH	16.310	DrugY	16
##	194	72	M	LOW	HIGH	6.769	drugC	6
##	195	46	F	HIGH	HIGH	34.686	DrugY	34
##	196	56	F	LOW	HIGH	11.567	drugC	11
##	197	16	M	LOW	HIGH	12.006	drugC	12
##	198	52	M	NORMAL	HIGH	9.894	drugX	9
##	199	23	M	NORMAL	NORMAL	14.020	drugX	14
##	200	40	F	LOW	NORMAL	11.349	drugX	11