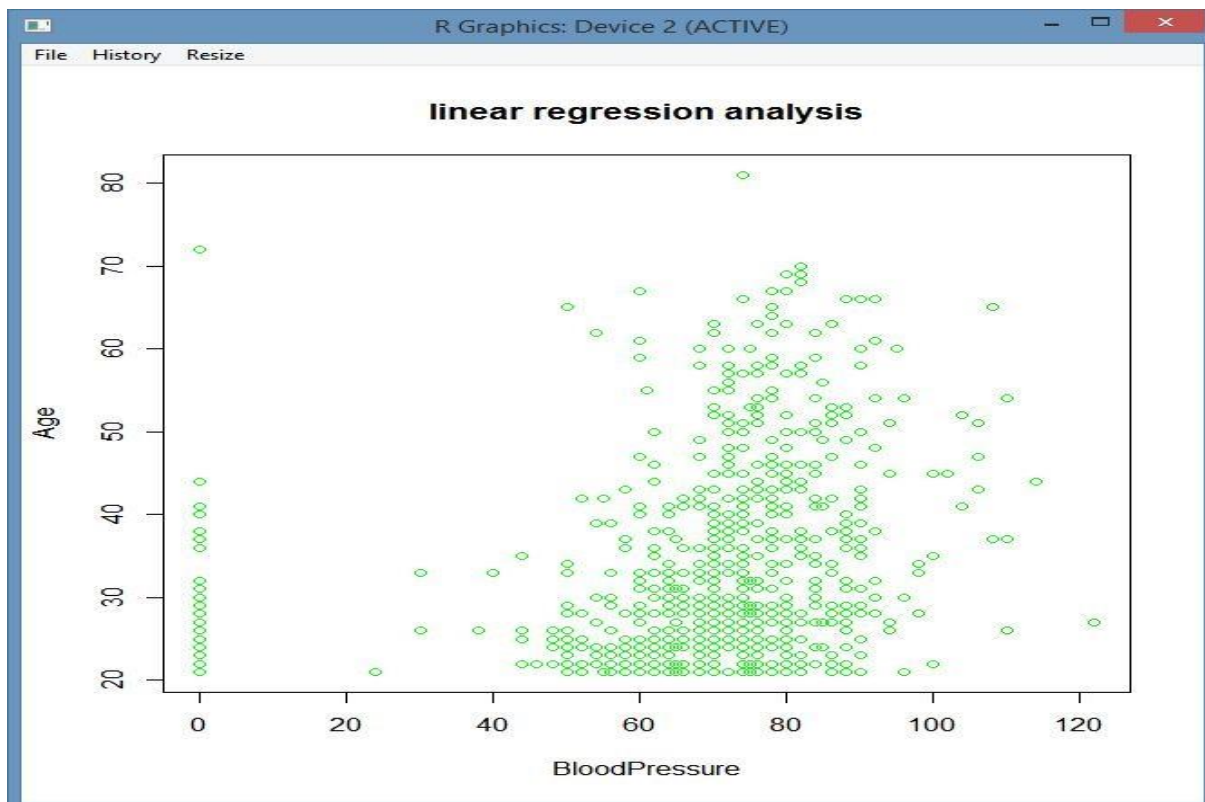


## ***EXPERIMENT-4***

### REGRESSION ANALYSIS USING R TOOL

OUTPUT:

**LINEAR REGRESSION :**



```

Console ~/
6: In title(...) : "abline" is not a graphical parameter
> A<-data.frame(diabetes$Age)
> result<-predict(relation,A)
> print(result)
      1      2      3      4      5      6      7      8      9
75.71244 68.22204 68.61627 64.27972 69.01050 67.82781 66.25088 67.43358 76.89514
     10     11     12     13     14     15     16     17     18
77.28937 67.82781 69.40474 78.47207 79.26053 76.10668 68.61627 68.22204 68.22204
     19     20     21     22     23     24     25     26     27
69.01050 68.61627 66.64511 75.71244 72.16436 67.43358 76.10668 72.16436 72.95282
     28     29     30     31     32     33     34     35     36
64.67395 78.47207 70.98166 79.65476 67.03935 64.67395 67.03935 73.74129 69.01050
     37     38     39     40     41     42     43     44     45
69.79897 74.13552 66.64511 78.07783 66.25088 70.58743 74.92398 77.28937 71.77013
     46     47     48     49     50     51     52     53     54
65.85665 67.43358 64.67395 68.22204 65.46242 64.67395 66.25088 67.82781 78.86630
     55     56     57     58     59     60     61     62     63

```

## MULTIPLE REGRESSION:

```

Console ~/
71.37589 76.50091 66.25088 82.02015 64.67395 72.95282 69.01050 80.83746 66.64511
766      767      768
67.82781 74.52975 65.06819
> input<-diabetes[,c("Age","BloodPressure","Glucose")]
> model<-lm(Age~BloodPressure+Glucose,data = input)
> print(model)

Call:
lm(formula = Age ~ BloodPressure + Glucose, data = input)

Coefficients:
(Intercept)  BloodPressure      Glucose
   14.33937      0.12399      0.08547
>

```

```


Console ~/
> input<-diabetes[,c("Age","BloodPressure","Glucose")]
> model<-lm(Age~BloodPressure+Glucose,data = input)
> print(model)

Call:
lm(formula = Age ~ BloodPressure + Glucose, data = input)

Coefficients:
(Intercept)  BloodPressure      Glucose
   14.33937      0.12399      0.08547

> A<-coef(model)[1]
> print(A)
(Intercept)
   14.33937
>

```

```
Console ~/ 
> print(xBloodPressure)
BloodPressure
0.1239891
> xBloodPressure<-coef(model)[2]
> yGlucose<-coef(model)[3]
> print(xBloodPressure)
BloodPressure
0.1239891
> print(yGlucose)
Glucose
0.08547277
> y=A+xBloodPressure+xGlucose
> print(y)
(Intercept)
14.54883
> |
```