## Solutions For Assignment 01

## STA 101

## Problame01

Range: 20
MD: 4.56
SD: 6.1245

## Problame 02

CV of A: 20.63\%
CV of B: 16.07\%
Since the value of CV of $A$ is $20.63 \%$ more than that of $B 16.07 \%$. Therefore, $B$ should get the prize.

## Problame03

i) Mean (Model A) : 5.12 year Mean (Model A) : 6.16 year
ii) Since the value of CV of Model A is $157.62 \%$ more than that of Model B $83.44 \%$. Therefore, Model B has greater uniformity.

## Problame04

(i) Total Wage

Firm A: 240000Rs.
Firm B: 285000Rs.
Firm $B$ pays a larger wage bill.
(ii) Since the value of CV of Firm A is $83.33 \%$ less than that of Firm B 131.58\%. Therefore, Firm B has greater variability in individual wages.

## Page114 / Ex: 23

69\% observations

## Page114/Ex: 24

97.35\% observations

## Page114/Ex: 25

a) $95 \%$
b) $47.5 \%$
2.5\%

## Page127 / Ex: 39

a) 350
b) $\mathrm{Q} 1=175, \mathrm{Q} 3=930$
c) $930-175=755$
d) Less than 0 or more than about 2060
e) No outliers
f) The distribution is positively skewed

## Page134 / Ex: 69

a) Mean: 173.77

Median: 195
SD: 105.61
b) CV: $60.78 \%$

SK: -0.603 (As, SK<0, so it is negatively skewed.)
c) $\mathrm{L} 45=192.9$
$\mathrm{L} 82=276.8$
d) There is a slight negative skew ness visible, but no outliners.

