Assignment -1.

Problem Statement : 1

Data = 1550\$, 1700\$, 900\$, 850\$, 1000\$, 950\$

Data x	$(x-\mu)^2$
1550	153,406.38
1700	293,406.38
900	66,734.38
850	95,067.38
1000	25,068.38
950	43,401.88

mean (μ) = 1,158.33 $\dfrac{\Sigma(x-\mu)^2}{N}$ = 112847.21

$$\sigma = \frac{\Sigma(x-\mu)^2}{N} = 112,847.21$$

$$N = 6$$

$$SD = \sqrt{\frac{\Sigma(x-\mu)^2}{N}} = 335.927$$

Problem Statement : 2

Data(x)	$(\bar{x}-\mu)^2$
3	+45.56
21	126.56
98	7788.06
203	37,345.56
17	52.56
9	0.56

$\Sigma x = 58.5$ $\Sigma(x-\mu)^2 = 45,359.36$

$$\mu = \frac{\Sigma x_i}{n} = \frac{58.5}{6} = 9.75$$

$$\sigma^2 = \frac{\Sigma(x-\mu)^2}{N} = \frac{45,359.36}{6}$$

$$\sigma^2 = 7559.89$$

Problem Statement : 3

P (failing in 0 Subjects) $P(x=0) = 0.8$

P (failing in 1 Subject) $P(x=1) = 0.1$

P (failing in 2 Subjects) $P(x=2) = 0.07$

P (failing in 3 Subjects) $P(x=3) = 0.03$