Stat 100 Assignment 4 Solution

(Simulation result may vary.)

Cycle 1 (Let cycle 1 be x)   Cycle 2 (Let cycle 2 be y)

# of words	Page #
13.5	33
11	39
14	45
11	57
13	64
10.5	71
13	75
14	81
13	83

# of words	Page #
11.5	89
15	95
13	99
12	107
13	111
13	119
12	121
12	127
14	131

Mean(of x) = 12.556   Mean (of y) = 12.833
SD (of x) = 1.279   SD (of y) = 1.054

1) The difference between the two means = 12.833 – 12.556 = 0.277

2) To predict the closeness of the average from the two cycles before you actually did the second cycle, calculate the SD(of mean) = SD(of x) / root(n)
$$= 1.279 / root(9)$$
$$= 0.4263$$

(Out of 5 marks: 1 for doing the simulation and giving the page #, 1 for calculating the means and standard deviations, 1.5 for showing the difference between the mean and giving comment about the closeness, 1.5 for calculating the SD(of mean))