SCHOOL OF COMPUTING AND ENGINEERING SCIENCES ASSIGNMENT
BACHELOR OF SCIENCE IN INFORMATICS AND COMPUTER SCIENCE ICS 2106: PROBABILITY AND STATISTICS 1

INSTRUCTIONS:
Use R, python, Excel etc to genetare the plots.

T OT AL (20 *Marks*)
Data is provided in Data.xlsx, showing the number of hours spent coding and the number of coding bugs by 50 students

i. *Plot Hours Coding* (*x* − *axis*) *vs Num Bugs*(*y* − *axis*).

ii. Estimate Pearson's correlation coefficient r.

iii Develop a regression equation, *Num Bugs*(*y*) = *a* + *bHours Coding*(*x*). Use the model to predict bugs for 20 hours of coding.

iv. Develop a frequency distribution table of the the number of bugs

v. Plot a histogram of the *Num Bugs*.

vi. Overlay a normal curve on the histogram (using sample mean and standard deviation). 1