INTRODUCTION

The dataset contains the information and performance of 1000 students in a particular school. The information include the students gender, their parents academic qualification, the type of lunch each student usually have, the group each student belongs to, whether each student complete the test preparatory course and their scores in the three exams they had which are Maths, Reading and Writing. This analysis was conducted to check the factors that affected the scores of the students and the possible ways in which the students performance can be improved.

DATASET PREPARATION

Firstly, all the necessary libraries were imported. Then, the dataset information was checked to know if there are any ‘null value’ in which there are none. The three scores (Maths score, Reading score and Writing score) were added to get the total score each student has and the percentage score was also gotten that is, the total score of each student divided by 300, the result gotten is then multiplied by 100. Another table which is called ‘studentsGrade’ was added to the dataset which is determined based on the percentage score. The students’ grade can either be;

* A Students that had 70% and above
* B Students that had between 60% and 69%
* C Students that had between 50% and 59%
* D Students that had between 40% and 49%
* F Students that had less than 40%.

UNIVARIANT RESULTS

The total population of the female students is more than the male students. Majority of the students are in group c with 31.9% with students whose parent’s qualification is college degree is higher than students whose parents have other degrees. 64.5% of the students have standard lunch. 64.2% did not take the test preparatory course while 35.8% took the test. Majority of the students score an ‘A’. Majority of the students had 65 in their maths test while majority had 72 in their Reading test and majority had 74 in their Writing test.

MULTIVARIANT RESULTS

Majority of the students had an ‘A’ with most of them been female. Group C has the highest number of ‘A’ students and majority of students whose parents’ qualification is associate degree had an ‘A’. Majority of students who have standard lunch also have an ‘A’ and majority of the ‘A’ students did not take the test preparatory test. Group C has the highest number of students that took the test preparatory test.

CONCLUSION

It can be concluded that though majority of the students did not complete the test preparatory course, only very few of those that completed the course had a ‘D’ or ‘F’ that is, had below 50%. Also, majority of the students that completed the test preparatory course are from group C and D and this reflected in their results because higher number of students in group C and D had an ‘A’ that is, had above 70%. The quality and quantity of the students lunch also affected the students grade because most students who had standard lunch had ‘A’ that is, above 70%. As seen, the gap between students that had standard lunch and scored an A and those who had free/reduced have lunch and scored an ‘A’ is very wide that is, though some students that have free/reduced lunch also had an ‘A’, the number can’t be compared with those that had standard lunch.

RECOMMENDATION

I recommend that students should be encouraged or make compulsory to complete the test preparatory course it will help boost the students performance. I will also recommend that students should be encouraged to take standard lunch as the quantity of food can affect students performance because an underfed child might not be able to study well.