**Classwork/Lab Logistic Regression**

Probability of passing an exam versus hours of study

Use the R code , Methods and Procedures of Logistic Regression demonstrated in class to ultimately answer the following question:

**What is the probability that a student will pass an exam if they study 5.3 hours preparing for it ?**

Submit an RMarkdown file and a Word file on Canvas showing all work and required output

A group of 20 students spends between 0 and 6 hours studying for an exam. How does the number of hours spent studying affect the probability of the student passing the exam?

The table shows the number of hours each student spent studying, and whether they passed (1) or failed (0).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Hours** | 0.50 | 0.75 | 1.00 | 1.25 | 1.50 | 1.75 | 1.75 | 2.00 | 2.25 | 2.50 | 2.75 | 3.00 | 3.25 | 3.50 | 4.00 | 4.25 | 4.50 | 4.75 | 5.00 | 5.50 |
| **Pass** | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |