**Binary Logistic Regression Using Diabetes Data**

Train dataset size = 543

Validation dataset size = 107

Test dataset size = 118

Max iterations = 500

|  |  |
| --- | --- |
| **Learning Rate** | **Validation Accuracy** |
| 0.1 | 0.4643 |
| 0.01 | 0.4643 |
| 0.001 | 0.4821 |
| 0.0001 | 0.6071 |

After using different learning rate in the validation dataset,

I think I will choose learning\_rate = **0.0001** as it gave the highest accuracy.

Testing accuracy with chosen leaning\_rate = **0.6538**