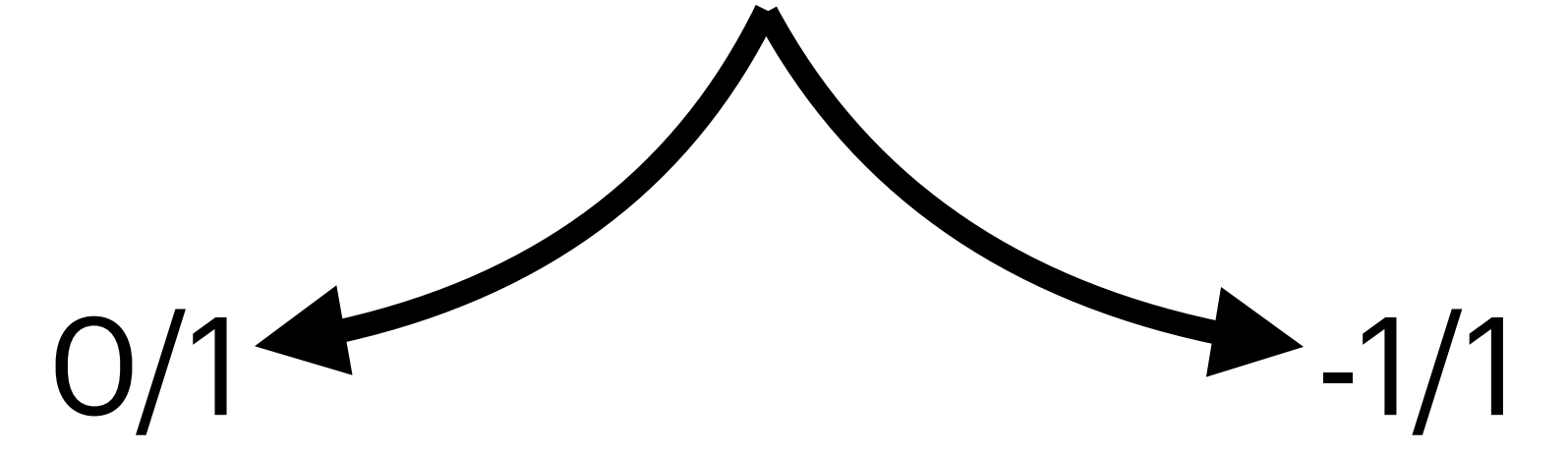
Dummy Variables: Adding a Bivariate Covariate

“one-hot encoding”

Income	Limit	Rating	Cards	Age	Education	Own	Student	Married	Region	Balance
14.891	3606	283	2	34	11	No	No	Yes	South	333
106.025	6645	483	3	82	15	Yes	Yes	Yes	West	903
104.593	7075	514	4	71	11	No	No	No	West	580
148.924	9504	681	3	36	11	Yes	No	No	West	964
55.882	4897	357	2	68	16	No	No	Yes	South	331
80.180	8047	569	4	77	10	No	No	No	South	1151

[Source: First six rows of dataset “Credit”, ISLR2]

$$Y = \beta_0 + \beta_1 X$$


0/1
-1/1

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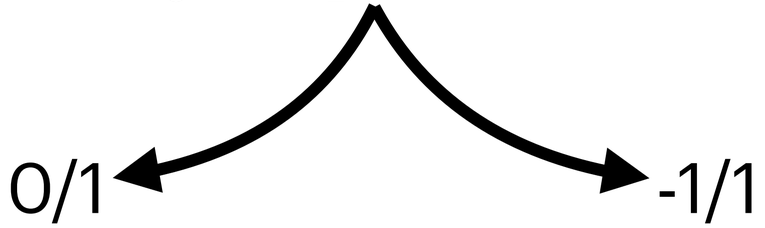

Feature Engineering