

Problem Descriptionwe are to create a function that says yes if the number is above 5000 psi and says no if its below or equal to 5000 psi. Then we calculate the descriptive data and create a histogram.

Input Section:

Table 1: Given data of compression strength	yes if the number in
test of pieces of 2x4 southern pine lumber	column a is greater than
compression strength [psi]	5000, otherwise no
4105.1	no
5194.3	yes
4811.5	no
3045.4	no
4341.5	no
5780.2	yes
3515.5	no
3748.8	no
3673.6	no
7872.2	yes
5495.1	yes
6013.4	yes
4224.4	no
4597.3	no
3827.3	no
3529.1	no
7735.2	yes
3775.4	no
4607.5	no
4625.1	no
4154.8	no
3982.3	no
3246.0	no
4689.3	no
4956.6	no
5671.3	yes
5340.6	yes
5751.0	yes
3823.5	no
4114.0	no
4733.4	no
4074.0	no
2001.2	no
5156.6	yes
4814.4	no
3805.2	no
5381.1	yes
5098.1	yes
3383.7	no
4908.5	no
4075.2	no
4159.8	no
4875.3	no
4555.4	no
5322.3	yes
3562.0	no
6703.6	yes
5413.2	yes
4562.4	no
4105.5	no
6514.6	yes
4806.7	no
3310.9	no
3902.6	no
3238.1	no
4120.1	no
3412.8	no
4666.1	no
9446.4	yes
3138.6	no
5296.3	yes
4321.9	no
5611.4	yes
3857.8	no
3224.3	no
3275.5	no
4183.8	no
4025.0	no
3965.0	no
3862.2	no
4721.3	no
3907.0	no
3887.6	no
4174.2	no
4285.4	no
6205.5	yes
4320.5	no
3869.1	no
2467.1	no
3735.0	no
4657.5	no
4046.9	no
3554.1	no
6300.1	yes
6960.6	yes
4594.5	no
6401.0	yes
3934.8	no
4791.1	no
5980.9	yes
5119.9	yes
10772.7	yes
4391.1	no
6895.3	yes
5609.8	yes
6235.1	yes
8161.9	yes
5570.8	yes
5740.3	yes
8331.4	yes

Calculation Section:

number of compression values greater than 5000 psi	33
number of total data points	100
percentage of measurements above 5000 psi	0.33
minimum	2001.2
maximum	10772.7
range	8769.5
mean	4786.4
Standard Deviation	1425.00571

Output Section:

