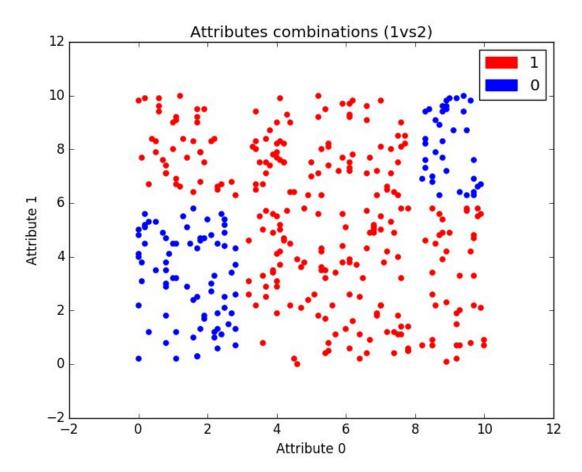
1. Graph:



- 2. The program might have had to deal with ties, but i did not deal with it.
- 3. The program stopped when it could not split any more. Usually it would stop when the original array was split until there was nothing to split on.
- 4. The final classifier was a 1 main split, and 2 sub splits within the main one. As seen above, the first split would be along the y axis, and above that value, there would be no more splits. Below that y threshold, there were 3 splits on the x axis. The tree generated was:
 - a. Gini:
 - i. Root-> (2.8, 0)
 - ii. Root->Left-> (5.8, 1)
 - iii. Root->Right-> (8.2, 0)
 - iv. Root->Right->Left-> (7.8, 0)
 - v. Root->Right->Right (5.8, 1)
 - vi. Root->Left->Left (2.8, 0)
 - vii. Root->Left->Right (2.4, 0)
- 5. On the training data, the accuracy was 97.5%
- 6. The program just created the thresholds, then i manually put them in.