







- 1) All the examples from the training which is belong to the same Class
- 2) The training set is empty
- 3) The attribute list is empty (returns a leaf labelled with the most frequent class or the disjunction of all the classes)

## 6. Results and Discussion

In our result shows C4.5 decision tree algorithm gives the more accuracy than RDT and ID3. Accuracy: The measurements of a quantity to that quantity's factual value to the degree of familiarity are known as accuracy. The Table 1 presents a comparison of ID3, C4.5 and RDT accuracy with different data set size, this comparison is presented graphically in Figure 1.

Dataset size	ID3(%)	C4.5(%)	RDT(%)
14	94.15	96.2	91
24	78.47	83.52	72.33
35	82.2	84.12	77.65

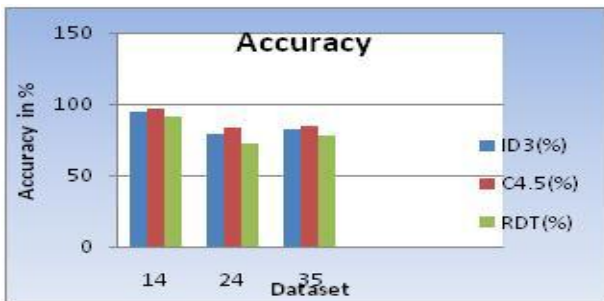


Figure 1: Comparison Graph

The 2nd is compared between ID3 and C4.5 is the execution time, Table 5 present the comparison. This comparison is presented graphically in Figure.

Dataset size	ID3(%)	C4.5(%)
14	0.215	0.0015
25	0.32	0.17
35	0.39	0.23



Figure 2: Comparison of Execution Time for ID3 C4.5 Algorithm

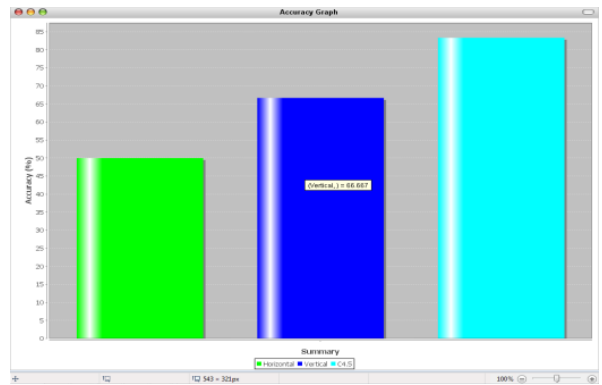


Figure 3: Accuracy Graph

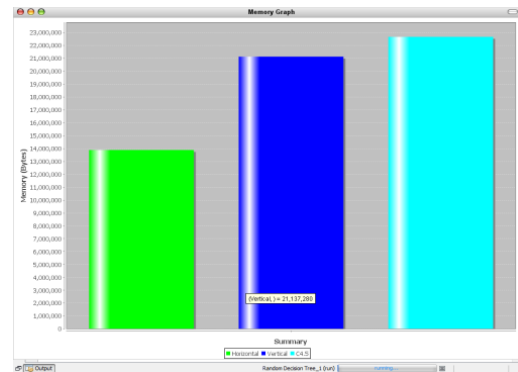


Figure 4: Memory graph

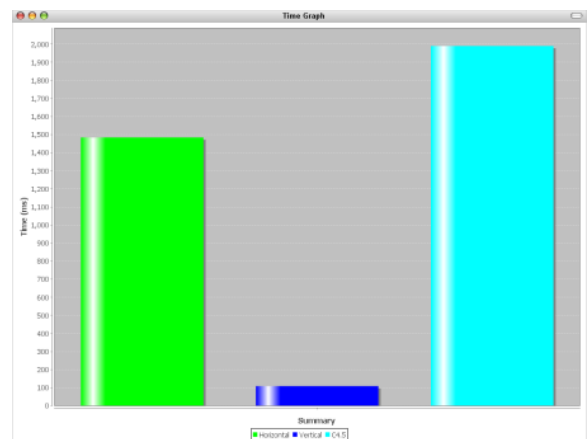


Figure 5: Time Graph

## 7. Conclusion

The security and privacy suggestions are considered when managing distributed data that is partitioned either on horizontally or vertically across multiple sites, and the difficulties of obtaining data mining tasks on such data. Since RDTs can be used to create identical, exact and off and better models with much less cost, distributed privacy-protecting RDTs is presented. This methodology powers the way that randomness in structure can give solid privacy with low computation. We also use C4.5 algorithm to generate decision for privacy preserving tree which have better performance than ID3 on the basis of accuracy, speed and memory storage.

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