SPLAY PREFIX CODE

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DATA STRUCTURES USED

- For creating the tree, used Heap
- Heap has the highest frequency node near the top hence requiring less encoding.
- For reducing the encoding size splay operation is used.
- Hence use of splay trees

STRUCTURE OF THE NODE

- struct node {

  char data;

  unsigned freq;

  struct node *left, *right;

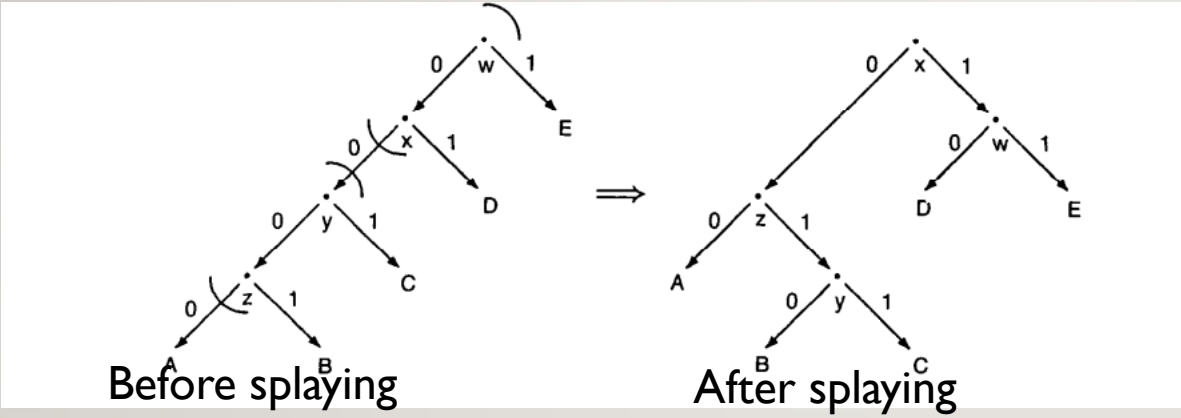
};

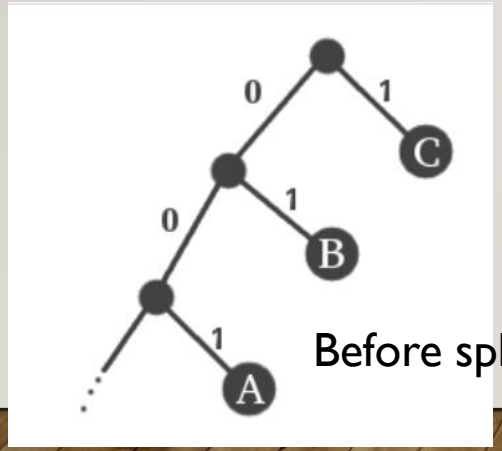
- Char data stores the character like ‘a’or’b’ etc
- Freq stores the number of times that character is appearing in the text.

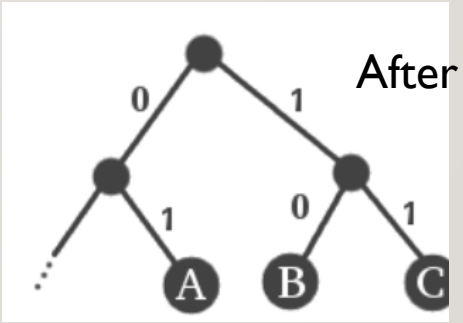
SEMISPLAYING

- The effect of semisplaying along the path from the root (node w) to leaf node A is to rotate each successive pair of internal nodes.
- In the process, the nodes in each pair that were farthest from the root stay on the new path (nodes x and z), while those that were closest move off the path (nodes w and y).
- Next slide shows the image.

SEMISPLAYING







RESOURCES

- https://eprint.iacr.org/2010/425.pdf
- https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.137.1924&rep=rep1&type=pdf
- https://www.javatpoint.com/splay-tree