Lecture-11

1. What are the advantages of Fiduccia-Mattheyses algorithm over Kernighan-Lin algorithm?
2. What are the similarities between Fiduccia-Mattheyses algorithm and Kernighan-Lin algorithm?
3. Present the Fiduccia-Mattheyses Algorithm. Find out its time complexity.
4. Apply Fiduccia-Mattheyses Algorithm for the problem in question 7.
5. Apply Fiduccia-Mattheyses Algorithm for the problem in question 8.
6. Apply Fiduccia-Mattheyses Algorithm for the problem in question 10.
7. "There is a trade off associated for partitioning with replication." Is it true or false? Justify.
8. Discuss how Partitioning is affecting overall delay.
9. What do you understand by performance driven partitioning?
10. Discuss the approach of clustering in case of partitioning.

Lecture-12

11. Define Floorplanning.Define sliceable and non-sliceable floorplan with examples. What are the advantages of sliceable floorplan?
12. State with an example how a sliceable floorplan can be represented by a binary tree.
13. When an adjacency graph cannot admit a rectangular dual?
14. Obtain the hierarchical floorplan tree for the floorplan given in Fig.5.
15. Illustrate the steps of rectangular dualization on an inherently non-sliceable graph of n vertices.
16. Obtain a rectangular dual of the following adjacency graph.

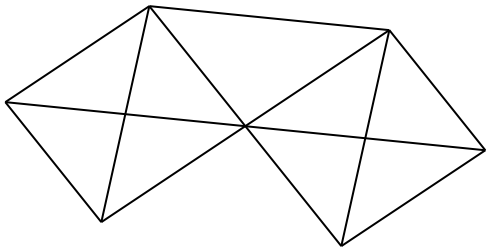

Fig. 3

17. Obtain the rectangular dual of the following adjacency graph below of Fig. 4.
18. Are the Floorplans obtained in 17 and 18 sliceable?
19. Prove that there is a one-to-one correspondence between a sliceable floorplan and a normalized Polish expression.
20. Give the adjacency graph for the following floorplan of Fig.5.

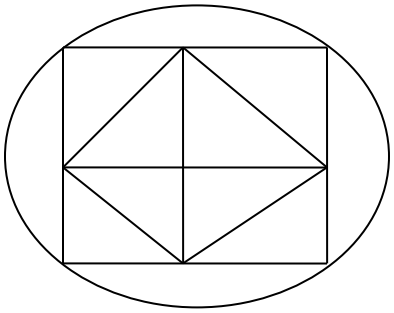

Fig. 4

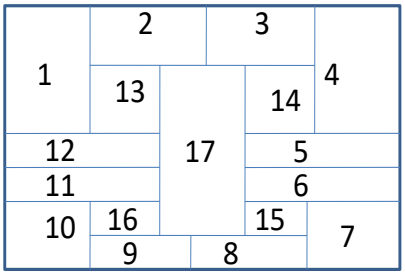

Fig.5