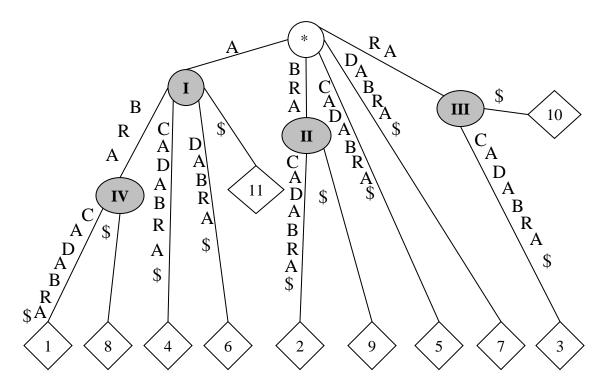
Quiz 5. Suffix tree – maximal repeats

The figure below represents a suffix tree for T=ABRACADABRA.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|------------------|---|---|------------------|------------------|------------------|---|------------------|------------------|----|------------------|----|
| \boldsymbol{A} | В | R | \boldsymbol{A} | \boldsymbol{C} | \boldsymbol{A} | D | \boldsymbol{A} | \boldsymbol{B} | R | \boldsymbol{A} | \$ |



1. List all the repetitive substrings of T and their corresponding internal nodes. The internal nodes are marked by roman numbers I, II, III and IV.

2. In what order these internal nodes are accessed during the depth-first traversal of the tree? (List them when they are encountered both when going downwards and upwards – an Euler tour through the suffix tree)