Optimal BST

- Suppose w_k becomes the root of the BST. Then $w_i, \ldots w_{k-1}$ will be in left subtree and $w_{k+1}, \ldots, w_j$ will be in right subtree.
- So total access cost will be

$$c[i,j] = \min_{i \le k \le j} \left\{ c[i,k-1] + c[k+1,j] + p_k + \sum_{l=i}^{k-1} p_l + \sum_{l=k+1}^{j} p_l \right\}$$

- Or,

$$c[i,j] = \min_{i \le k \le j} \left\{ c[i,k-1] + c[k+1,j] + \sum_{l=i}^{j} p_l \right\}$$