

1. What C keyword is used to define an alias for an existing type?
2. Derive the formula for the height / depth of a *balanced* binary tree as a function of the number of nodes, n , in the tree.
3. Write a C function called `toggle` that takes an `unsigned int` x and an `int` i as input and returns the resulting `unsigned int` after toggling the i^{th} bit in x .