PROGRAMMING
ADVICES LEARN THE RIGHT WAY

P

26+ Years
of Experience

Mohammed Abu-Hadhoud
MBA, PMOC, PgMP®, PMP®, PMI-RMP®, CB, ITILF, MCPD, MCSD

لا تنسى الاشتراك في قناتنا على اليوتيوب ومشاركة القناة مع اصدقائك
لتعم الفائدة للجميع وانقاذ الاف الناس من التشتت وجزاكم الله خيرا
لا تنسونا من دعائكم وادعو لوالدي بالرحمة
www.ProgrammingAdvices.com

Searching BST

Now, let's understand the searching in binary tree using an example.

Mohammed Abu-Hadhoud
MBA, PMOC, PgMPD, PMPD, PMI-RMPD, CM, ITILF, MCPD, MCSD
26+ years of experience

Suppose we have to find node 20 from the below tree.

Root

45

15   79

10   20   55   90

12   50

Suppose we have to find node 20 from the below tree.

Root

Root ——————————————————→ 45

Item = 20
(Item) < (root ——→data)
Root = Root ——→ left

15   79

10   20   55   90

12   50

Root

Item = 20

(Item) > (root ➝ data)

Root = Root ➝ Right
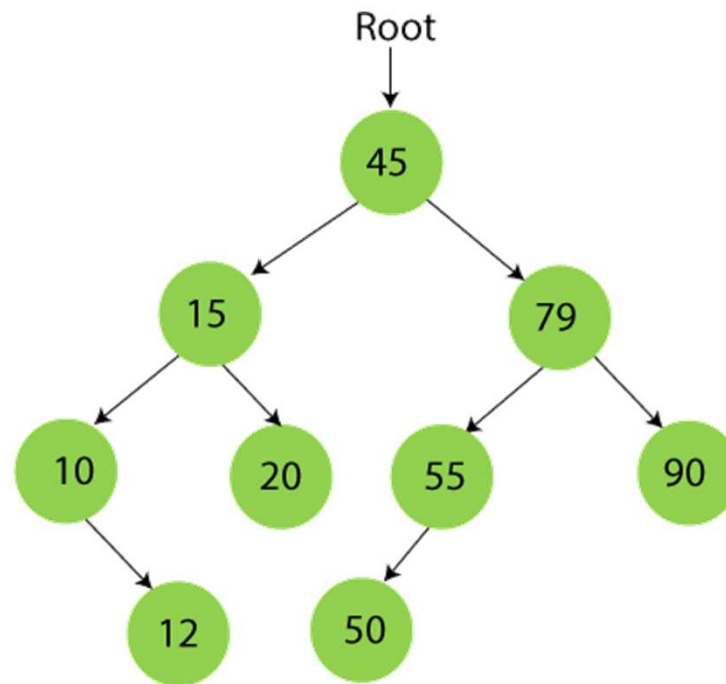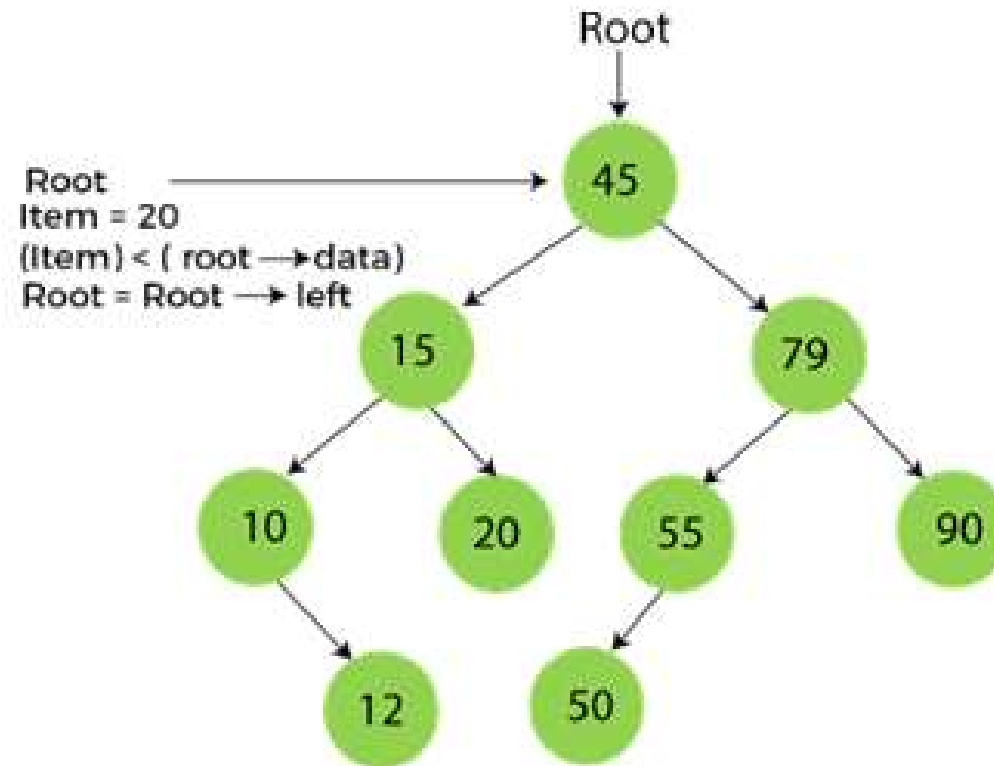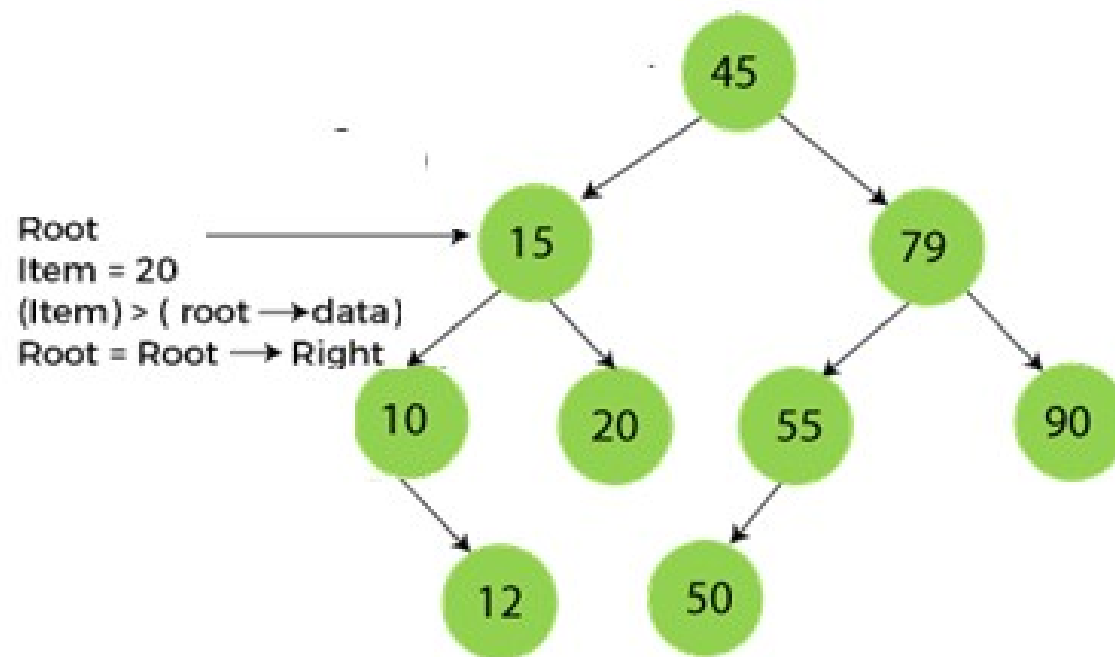
Root
Item = 20
(Item) = (root ➝ data)
return Root
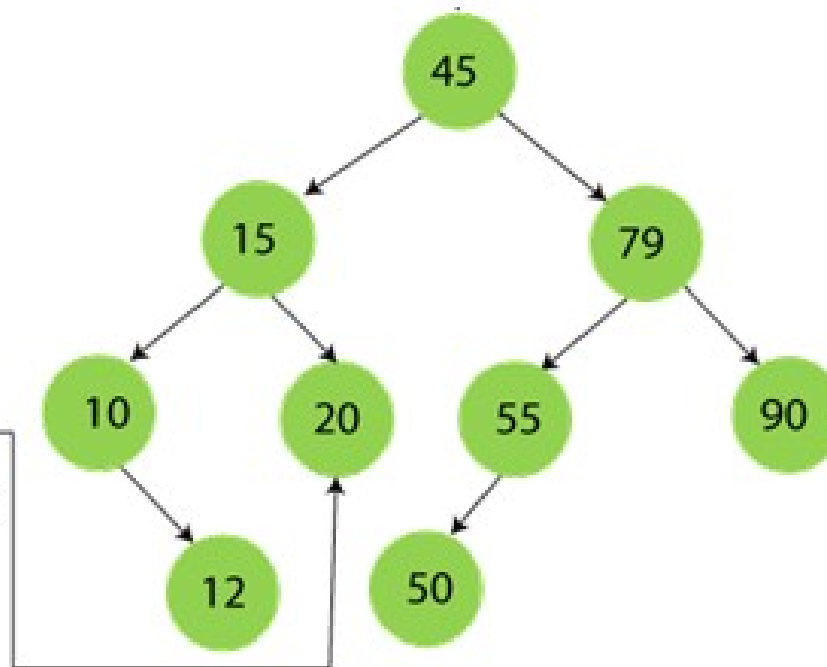
Searching BST

Searching means to find or locate a specific element or node in a data structure. In Binary search tree, searching a node is easy because elements in BST are stored in a specific order. The steps of searching a node in Binary Search tree are listed as follows –

- First, compare the element to be searched with the root element of the tree.
- If root is matched with the target element, then return the node's location.
- If it is not matched, then check whether the item is less than the root element, if it is smaller than the root element, then move to the left subtree.
- If it is larger than the root element, then move to the right subtree.
- Repeat the above procedure recursively until the match is found.
- If the element is not found or not present in the tree, then return NULL.

PROGRAMMING
ADVICES   LEARN THE RIGHT WAY
26+ years of experience

Copyright© 2024
ProgrammingAdivces.com

Mohammed Abu-Hadhoud
MBA, PMOC, PgMPD, PMPD, PMI-RMPD, CM, ITILF, MCPD, MCSD
26+ years of experience

BST Search.

- Best/Average Case is O(Log n)
- Worst Case O(n)

Mohammed Abu-Hadhoud
MBA, PMOC, PgMPD, PMPD, PMI-RMPD, CM, ITILF, MCPD, MCSD
26+ years of experience

ProgrammingAdvices.com

Thank You

Mohammmed Abu-Hadhoud

26+ Years of Experience

MBA, PMOC, PgMP®, PMP®, PMI-RMP®, CM, ITILF, MCPD, MCSD

PROGRAMMING ADVICES | LEARN THE RIGHT WAY