PAGE NO. :
DATE : / /

```
Node over insertion (int key, Node head)
{   if (head == null) new Node (key)
    if (key < head.data) Node.left = insertion(key,
else if (key > head.data) Node.right = insertion(key, head.
else {
        if (head.left != null && head.right == null)
        {
            head = null;
        }
    elseif (head.left == null || head.right == null)
    {       Node temp = null;
            if (head.left == null)
            {   temp = head.right;
            }
            else   temp = head.left;
            head = temp;
    }
    else {  Node temp = max left (head.left)
            head.data = temp.data;
            head.left =   delete (head.data, head
    }
```

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PAGE NO. :
DATE : / /

```
if (head == null) return null;

head.height = 1 + Math.max(head.left + head.right)
int bal = getBalance(head)
if (balance > 1 && getBalance(head.left) <= 0)
{ head.left = rotateLeft(head.left);
  return rotateRight(head);
}
if (balance > 1 && getBalance(head.left) >= 0)
{ return rotateRight(head);
}
if (balance < -1 && getBalance(head.left) <= 0)
{ return rotateLeft(head);
}
if (balance < -1 && getBalance(head.left) > 0)
{ head.right = rotateRight(head.left);
  return rotateLeft(head);
}
return head;
}
```

node insert (Node head, int data)
{ if (head == null) return new Node (data);
if (data < head.data)
head.left = insert (head.left,
else if (data > head.data)
head.right = insert (head.right,