

## Binomial Heap Operations

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18M18CS089

// DecreaseKeyBHeap

```
void decreaseKeyBHeap(Node *H, int old_val, int new_val)
{
```

// Check element is present or not

Node \*node = findNode(H, old\_val);

// return if node is not present.

if (node == NULL)

return;

// reduce the value to minimum

node->val = new\_val;

Node \*parent = node->parent;

// Update the heap according to reduced value

while( parent != NULL && node->val < parent->val)

{ swap (node->val, parent->val);

node = parent;

parent = parent->parent;

}

}

// Delete

Node \*binomialHeapDelete (Node \*h, int val)

{

// Check if heap is empty or not

if (h == NULL)

return NULL;

// Reduce the value of element to minimum

decreaseKeyBHeap(h, val, INT\_MIN);

// Delete min element from HEAP.

return extractMinBHeap(h);

}