

Prog-10 : Binomial Heap ops.

(i) Delete (H) (ii) decrease key(H)

// Decrease key

Void decrease keyBHeap (Node *H, int old-value,
int new-value)

{

// 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 min

node->val = new-val;

Node *parent = node->parent;

// update the heap acc to reduced val

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

{

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

node = parent;

parent = parent->parent;

}

// Delete

Node *binomialHeap Delete (Node *h, int val)

{

// check if heap is empty / not

if (h == NULL)

return NULL;

// Reduce the val of ele to min

decrease keyBHeap (h, val, INT_MIN);

// Delete min ele from heap

return extractMinBHeap (h);

}

