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ADS

LAB-10

REUVANTH-K

IBM185082

Delete(H) and

decrease

decrease key(H) function

on Binomial Heap

```
void decreasing BHeap ( Node *H, int old_val  
                        int new_val )
```

```
{ Node *node = findNode ( H, old_val );
```

```
  if ( Node == NULL )
```

```
    return;
```

```
  node → val = new_val;
```

```
  Node *parent = node → parent;
```

```
  while ( parent != NULL && node → val > parent → val )
```

```
{    swap ( node → val , parent → val );
```

```
      node = parent;
```

```
      parent = parent → parent;
```

```
  } }
```

// Function to delete an element

```
Node * Binomial Heap delete ( Node *h, int val )
```

```
{ if ( h == NULL )
```

```
  return NULL;
```

decrease key BHeap (h, val, INF-MIN)

return extractMinBHeap(h);

}

// Function Find Node

Node * findNode (Node *h, int val)

{ if (h == NULL)

return NULL;

if (h->val == val)

return h;

Node * res = findNode (h->child, val);

if (res != NULL)

return res;

return findNode (h->sibling, val);

}