LAB-10

Arpana M Ramaswamy
1BM18CS147
Arpana
16/12/2020

Q) Implement delete(H) and decreasekey(H)

```
void decreasekey(Node *H, int val, int nval)
{
    Node *node = findNode(H, val);
    if (node == NULL) // if node value doesn't exist
        return;

    node->value = nval;
    Node* parent = node->parent;

    while (parent != NULL && node->value < parent->value)
    {
        swap(node->value, parent->value)
        node = parent.
        parent = parent->parent;
    }
}
```

Arpana M R
1BM18CS147
Arpana

```
Node *Delete(Node *H, int num)
{
  if (H==NULL)   //if heap empty, return
   return NULL;

decreasekey(H, num, mini)

return ExtractMin(H);
}
```

/*For delete, we first find the node containing value
and swap it for mini [minimum value]
and update the heap, in decrease key.
Then we ExtractMin(), i.e, delete the ~~min~~ kea
node containing original value.*/