ADS LAB - 7

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1BM18CS087
5-B

pseudocode:

```
void insert(int k)
if root == NULL
  root= new Node (t, true);
  root → keys [0] = k ;
  root → n = 1;
  else
   if root → n == 2*t -1
   Node *S = new Node (t, false);
   S → C[0] = root;
   S → splitChild (0, root);
   int i=0 ;
   if (S → keys[0] < k)
    i++;
   S → C[i] → insert notFull (K) ;
   root = S ;
   else
   root → insert notFull (k);

void insert NotFull (int k)
 int i=n-1
  if leaf == true
  while i>=0 && keys [i] > n
  keys [i+1] = keys [i];
   i--
  keys [i+1] = K
  n = n+1
  else
```

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```
while i >= 0 && keys[i] > k
  i--;
  if c[i+1] -> n = 2*t - 1
  splitChild(i+1, c[i+1]);
  if keys[i+1] < k
    i++
  c[i+1] -> insertNotFull(k);
```