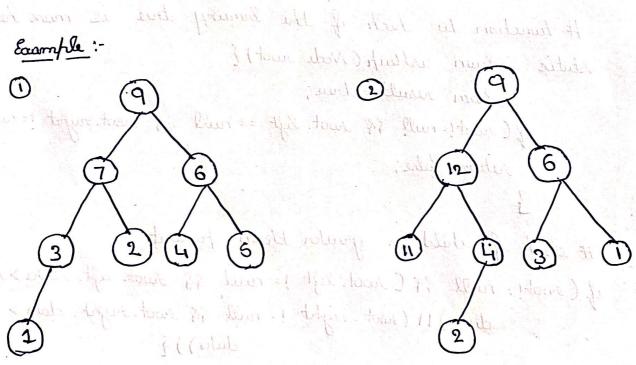
theak if a Birnary Iree is Heat :-

A Binary Tree to be heaf it has to satisfy 2 conditions:

1> It's complete -> All levels are fully filled expect the loss of nocles are added left to right.

2) Parents are bigger: Every farent node is greater than or (max heats property) equal to its children



true V

It is complete & satisfy max-hust frusturty.

false xo It is incomplete & closen't salisfy max-heat property also

If (hours of tryon of those 1/3 & then I die the door) If

inter john.

Klein the same I'm

```
Pragram !- ( - ( )
          class Nocle {
               int data;
              Noch light;
               Noch sight;
                                 from the sal was principle to
           Node (int wal) {
               data = val;
           left = null;
                                  2) the complete a to inche
           right = rull;
     class Charles of all bear to a formations of
        class Gfg to down the at they
            # Function to check if the binary tree is max heap.
           Static Godean isteap (Node swot) {
                  boolean result : true;
                 If ( root!= rull && swot. lift == rull && noot. right != rull) {
                 greturn false;
        # sheek if child is greater than favorit
          if (swot! = rull && ( root left != rull && swot left data > root.
                    data) 11 (noot. right != null 88 swot. right. data > swot.
                                          data)){
                                   return false;
                                       H in complete & subject
Hick if suft subtree has children but right is rull.
            of ( swot left != null) {
                  of ((noot. left != null # 11 noot. left. right != null) &&
                                   goot. left == rull ) 2
                  return false;
```

```
11 check if sight subtree has children
                                                 & left is rull.
   If ( most right != rull ) {
        If (( soot sight. left != rull 11 soot sight right != rull) &&
                    swoot sight == rull) &
                                                  AC . (conficends))
                 return false;
                                     Jour then Colonia
Il check if right subtree has children but not left subtree
    } ( llur = ! tyl .tour ) fi
      if ( swot left . left = = null && swoot left sught == null) {
             if ( swot sught . left 1= rull) ?
                  If ( noct right . left != null ) ?
                  return Jalse;
      3 3
      of ( swort != null && soot left != null) }
            boolean left = isteafr ( noot left);
           result = result && lift;
        if ( noot != rull gg noot sught != rull) {
             boolean let sight = isteaf ( root right);
             result = result & sight;
          seturn result.
      fullic static void main (string[] args) {
          Noch root = new Noche ( 10);
          swot left = new Made (9);
```

root. left. right : new Node (6) root. left. left = new Mode (\$7); swot - left : new Mech (5); swort sught : right = new Node (4); & (Klein + topin Hour of (isteap (noot)) { System. out- fountlin ("true"); 3 else { System. wet. fountlin ("false"); within the frank !! F (lever = 1 the store) & type the tour de leur = it after the) 3 (Dun , Ali . Lyur down) } I (human fish a tryon than I fle sutput !-True. musting pure of (From 1 4/7 year & Sport ingone) A known if the stape who is is. , My My Lucy - three . I (Sur = ! typer town It Blue = ! town) of restrain all maples collected to a collected to