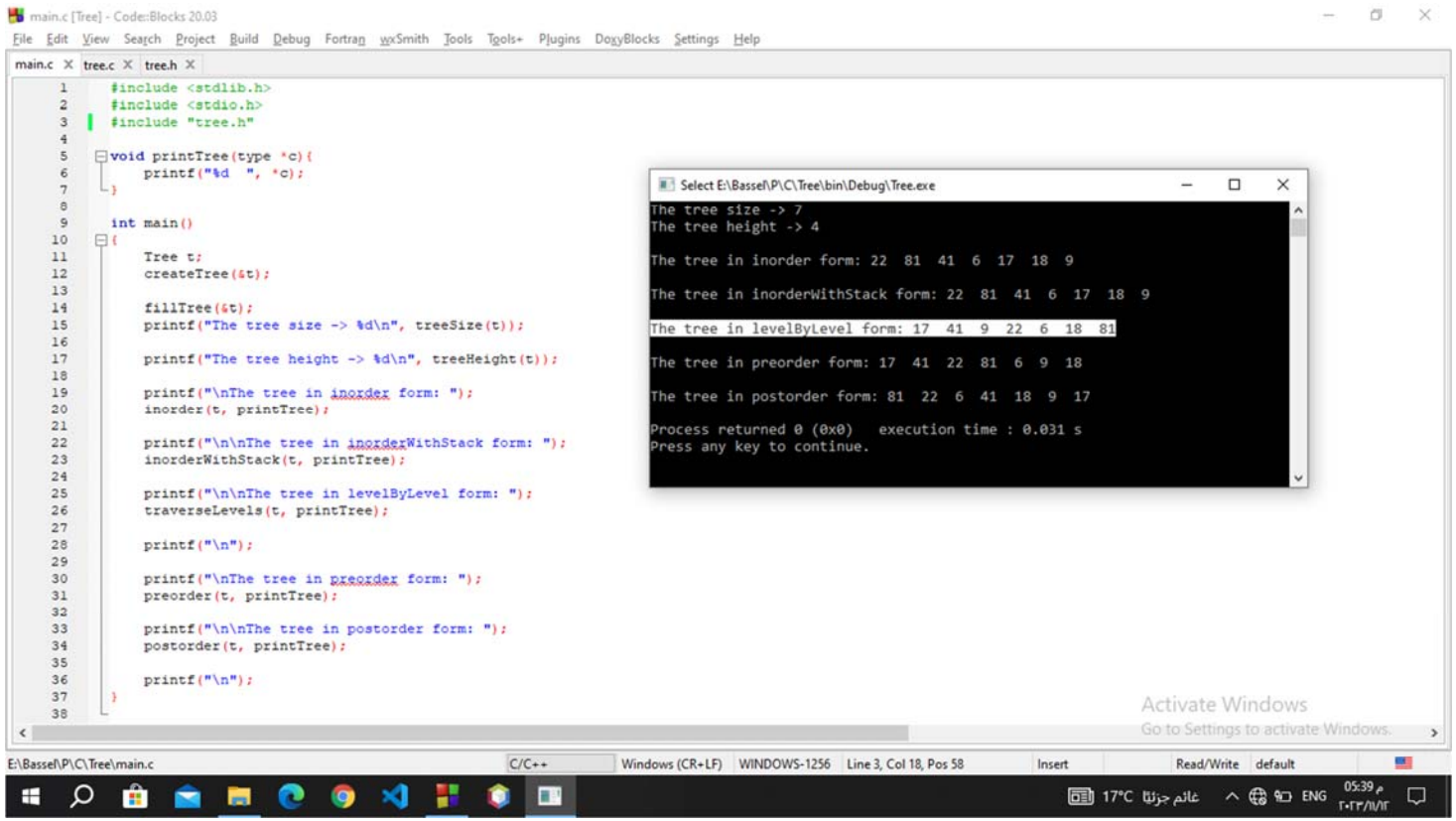
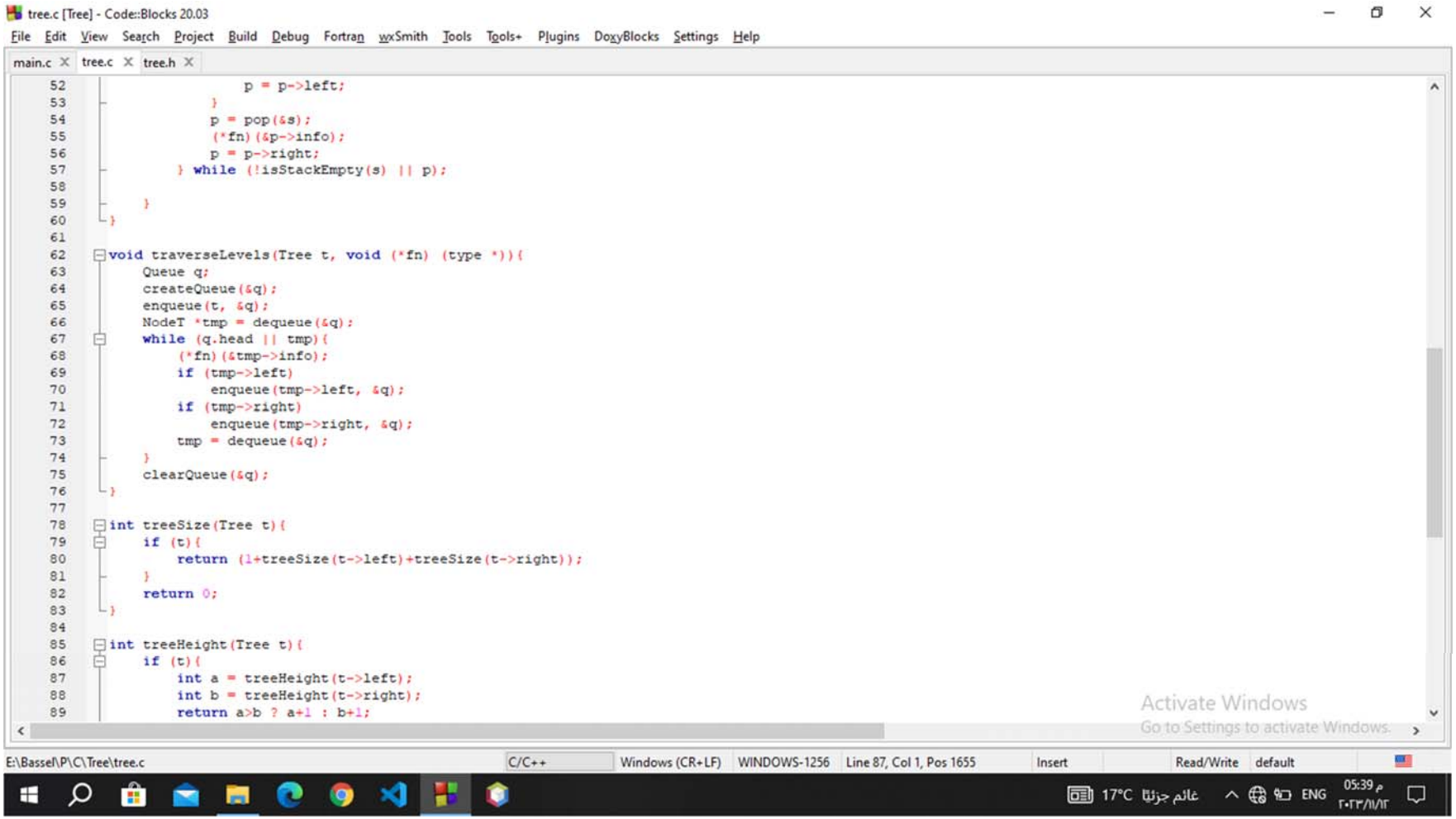
Name : Ahmed Hassan Ahmed Emara ID : 20220017

Q1:




tree.c [Tree] - Code::Blocks 20.03
File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help
main.c tree.c tree.h
52 p = p->left;
53 }
54 p = pop(&s);
55 (*fn)(&p->info);
56 p = p->right;
57 } while (!isStackEmpty(s) || p);
58
59 }
60 }
61
62 void traverseLevels(Tree t, void (*fn) (type *)){
63 Queue q;
64 createQueue(&q);
65 enqueue(t, &q);
66 NodeT *tmp = dequeue(&q);
67 while (q.head || tmp){
68 (*fn)(&tmp->info);
69 if (tmp->left)
70 enqueue(tmp->left, &q);
71 if (tmp->right)
72 enqueue(tmp->right, &q);
73 tmp = dequeue(&q);
74 }
75 clearQueue(&q);
76 }
77
78 int treeSize(Tree t){
79 if (t){
80 return (1+treeSize(t->left)+treeSize(t->right));
81 }
82 return 0;
83 }
84
85 int treeHeight(Tree t){
86 if (t){
87 int a = treeHeight(t->left);
88 int b = treeHeight(t->right);
89 return a>b ? a+1 : b+1;
Activate Windows
Go to Settings to activate Windows.
E:\Bassel\P\C\Tree\tree.c
C/C++
Windows (CR+LF)
WINDOWS-1256
Line 87, Col 1, Pos 1655
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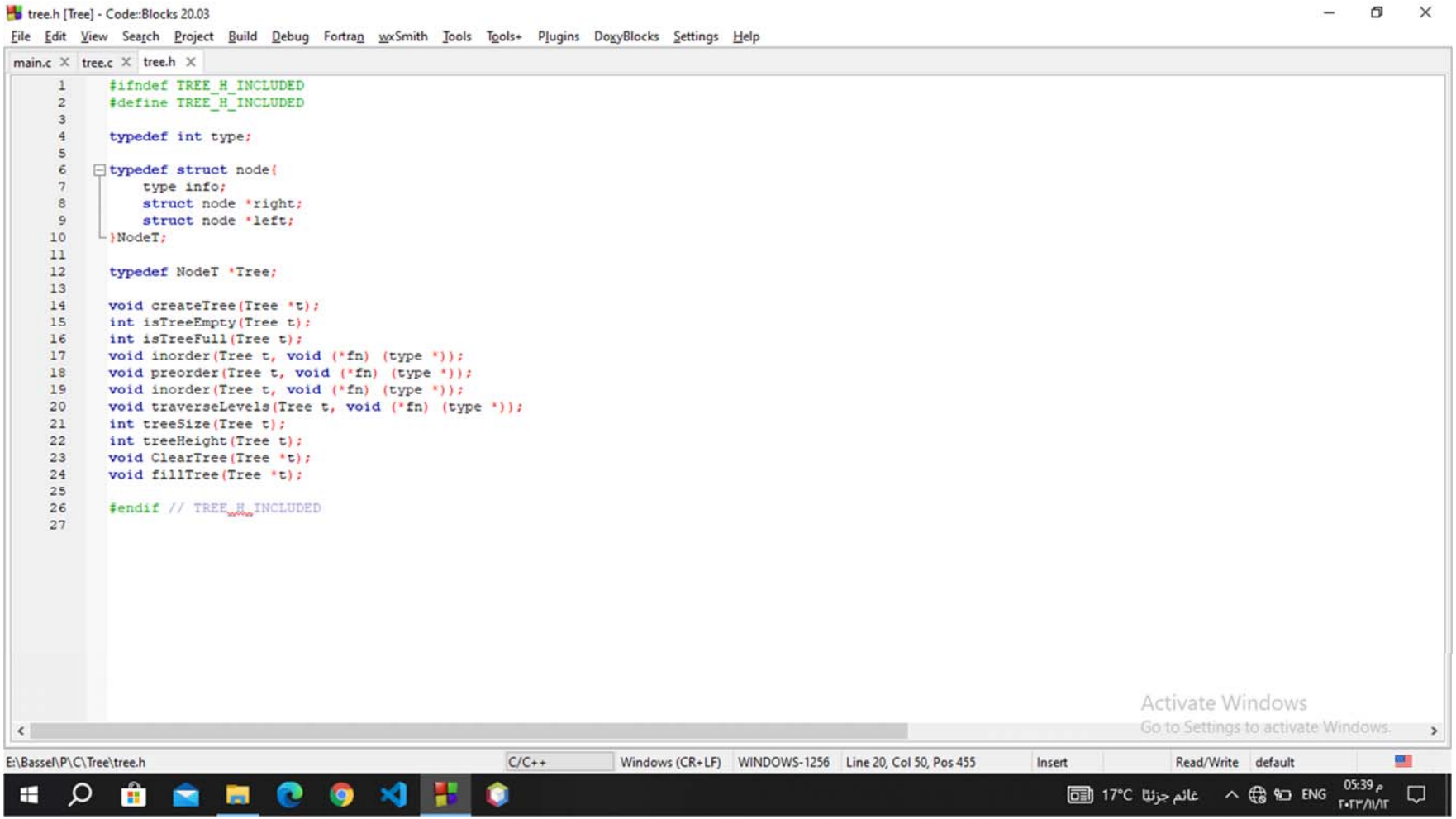
tree.h [Tree] - Code::Blocks 20.03
File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help
main.c
tree.c
tree.h
#ifndef TREE_H_INCLUDED
#define TREE_H_INCLUDED
typedef int type;
typedef struct node{
type info;
struct node *right;
struct node *left;
}NodeT;
typedef NodeT *Tree;
void createTree(Tree *t);
int isTreeEmpty(Tree t);
int isTreeFull(Tree t);
void inorder(Tree t, void (*fn) (type *));
void preorder(Tree t, void (*fn) (type *));
void inorder(Tree t, void (*fn) (type *));
void traverseLevels(Tree t, void (*fn) (type *));
int treeSize(Tree t);
int treeHeight(Tree t);
void ClearTree(Tree *t);
void fillTree(Tree *t);
#endif // TREE_H_INCLUDED
Activate Windows
Go to Settings to activate Windows.
E:\Bassel\P\C\Tree\tree.h
C/C++
Windows (CR+LF)
WINDOWS-1256
Line 20, Col 50, Pos 455
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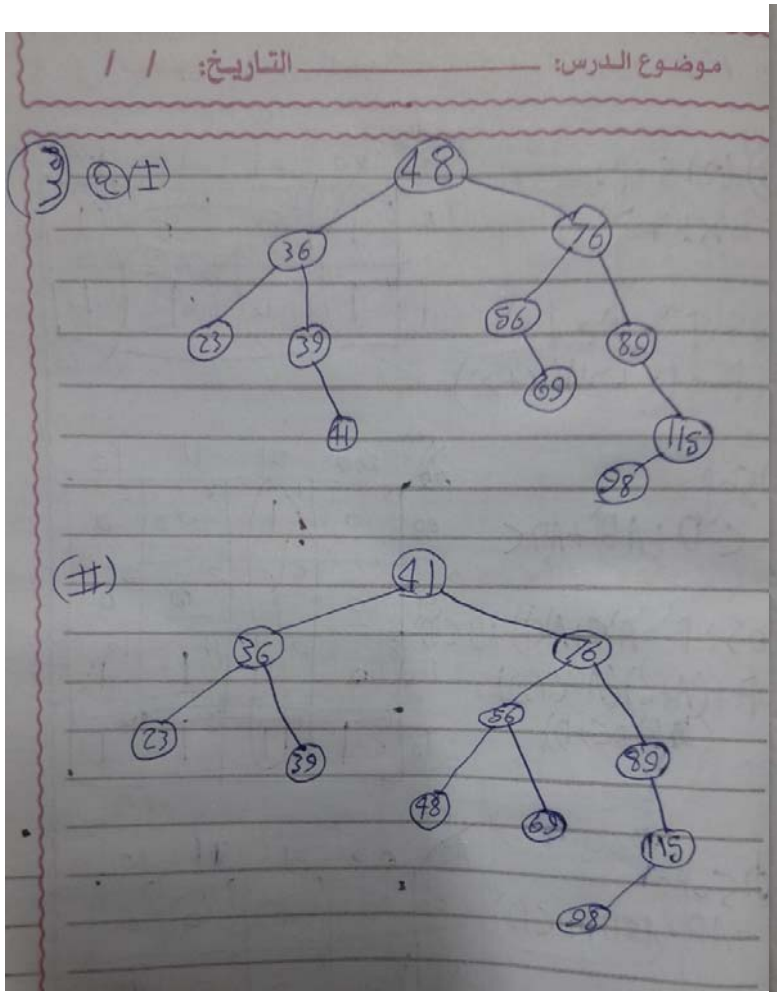
Q3: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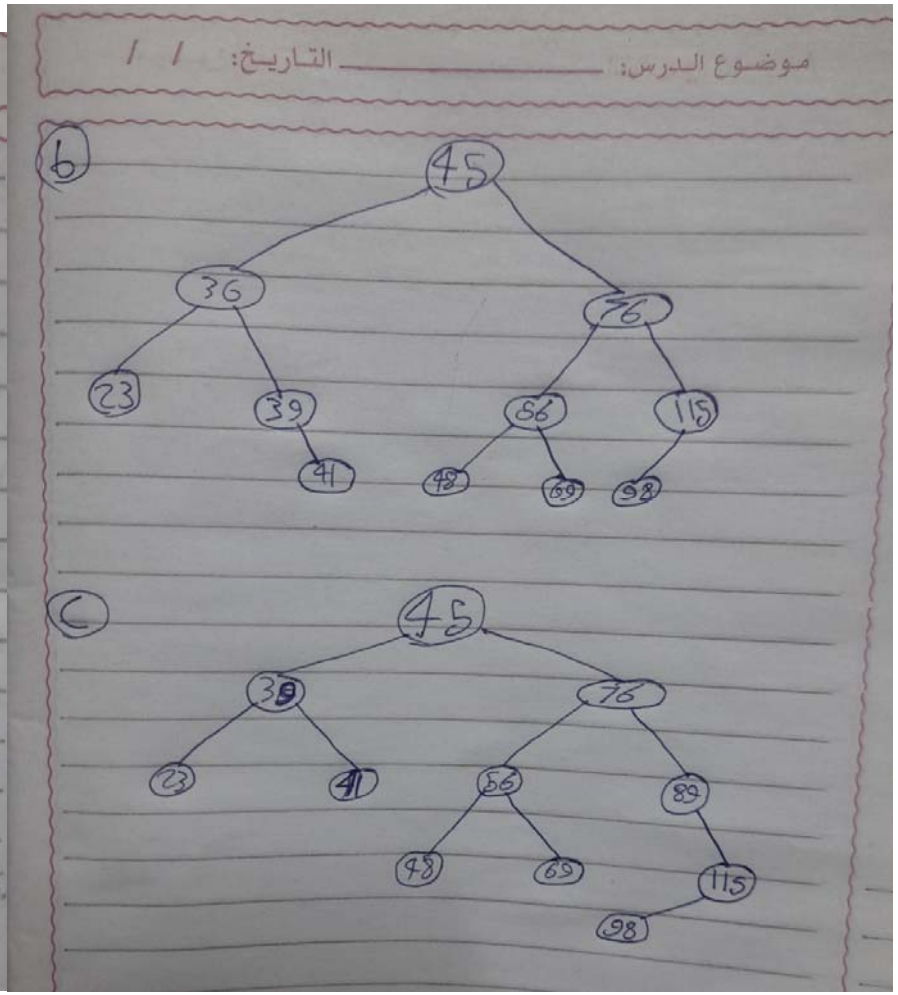
موضوع الدرس:
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