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////////////////////////////////////
////Class:      CS 445
////Semester:   Fall 2011
////Assignment: Homework 4
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////File name:  tree.h
////////////////////////////////////

#ifndef _TREE_H
#define _TREE_H

#define MAX_KIDS 9

#include <stdarg.h>
#include "symtabc.h"

struct tree {
    //int prodrule; //not sure on how to set the int yet
    char *prodrule;
    int nkids;
    struct tree *kids[MAX_KIDS];
    struct tree_token *leaf; //points to tree_token, terminals only
};

struct tree_token {
    int cat;
    char *text;
    int lineno;
    char *fname;
};

//symbol table stuff
static int maxTable_;           // this is how big the table is now since it can grow
static SymTabEntry *table_;     // the table is simply a fancy stack of SymTabEntries

//tree functions
int tree_init();
int tree_del(struct tree *);
int treeprint(struct tree *, int);
struct tree *tree_create_node(char *, int n_args, ...);
struct tree *tree_create_node_from_token(int, char*, int, char*);
int tree_gen_tac(struct tree *);

//Internal only
//getters of subtree members
void tree_get_subtree(char *, struct tree*, struct tree**);
char *tree_get_opt_type(struct tree*);
char *tree_get_opt_aux_flag(struct tree*);
char *tree_get_ident(struct tree*);

//general symbol table things
//int tree_update_sym_tab(struct tree *);

//general string stuff
//void tree_import_ident_to_path(char *, char **);

#endif

```