

3) (10 pts) ALG (Stacks)

A stack of *positive integers* is implemented using the struct shown below. Using this implementation of the stack write the *push* and *peek* functions. *Assume that when a struct stack is empty, its top variable is equal to -1.*

```
#define MAX 12

struct stack{
    int top;    /* indicates index of top */
    int nodes[MAX] ;
};

// Attempts to push value onto the stack pointed to by s.
// If the stack is full 0 is returned and no action is taken.
// Otherwise, value is pushed onto the stack and 1 is returned.
int push(struct stack* s, int value){

}

// Returns the value at the top of the stack. If the stack is
// empty, -1 is returned.
int peek(struct stack* s){

}

}
```