Balanced expression using stack

```c
#include < stdio.h >
#include < conio.h >
#define max 50
void main()
{
        char stk[max],exp[100];
        int top,i;
        clrscr();
        top = -1;
        printf("\nEnter an infix expression ");
        gets(exp);
        for(i=0; exp[i] != '\0'; i++)
        {
                if( exp[i]=='(' || exp[i] =='[' || exp[i] == '{' )
                {
                        top++;
                        stk[top]= exp[i];
                }
                else
                if ( exp[i] == ')' )
                {
                        if( stk[top] == '(' )
                        top--;
                }
                else
                {
                        printf("Unbalanced exp");
                        exit(0);
                }
                }
                else
                if ( exp[i] == ']' )
                {
                if( stk[top] == '[' )
                        top--;
                else
                {
                        printf("Unbalanced exp");
                        exit(0);
                }
                }
                else
                if ( exp[i] == '}' )
```

```c
                    {
                    if( stk[top] == '{' )
                              top--;
                    else
                    {
                              printf("Unbalanced exp");
                              exit(0);
                    }
                    }
         } // for
         if( top == -1 )
                    printf("Exp is balanced");
         else
                    printf("Exp is not balanced");
} // main
```