Remove Adjancent duplicates from string

```c
#include <stdio.h>
#include <string.h>
#include <stdlib.h>

char* removeDuplicates(char *str, char *lastRemoved)
{
        char *removeStr;
        //return string if length is either 1 or 0
        if( (str[0] == '\0') || (str [1] == '\0') )
                return str;

        if( str[0] == str[1])
        {
                *lastRemoved = str[0];
                while(str[1] && str[0] == str[1])
                        str++;
                return removeDuplicates(++str, lastRemoved);
        }
        removeStr = removeDuplicates(str+1, lastRemoved);
        if( removeStr[0] && removeStr[0] == str[0])
        {
                *lastRemoved = str[0];
                return (removeStr+1);
        }
        if( removeStr == '\0' && *lastRemoved == str[0])
                return removeStr;
        removeStr--;
        removeStr[0] = str[0];
        return removeStr;
}

int main()
{
        char str[100];
        printf("Enter Binary string");
        scanf("%s", str);
        char lastRemoved = '\0';
        printf("%s", removeDuplicates(str, &lastRemoved));
        return 0;
}
```

Time complexity: O(n)
Space complexity: O(1)