



**Ecole d'ingénieurs et d'architectes de Fribourg  
Hochschule für Technik und Architektur Freiburg**

# Microprocessors 3

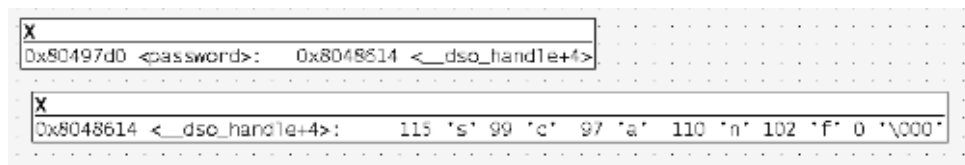
## Report lab 4 : Intel Assembler

Jonathan Stoppani et Elias Medawar

Version: March 24, 2011

## 1 Find the password used by the program

1. Run the program and analyse the basic functionality  
The program display Enter password  
We enter the password  
The program write Bad password.
2. use the command strings to analyse if there is some relevant string that can be a password.  
To many strings we can not exploit this method
3. objdump -d password\_1  
find main section, found a call for strcmp (string compare)  
Just before the call of strcmp will move on the stack 2 arg .  
One arg is the entered password and the second arg is a pointer(0x080497d0).
4. use ddd to find the value of the pointer (display 0x080497d0)  
we found the value 0x08048614
5. use ddd to display the value at address 0x08048614  
we found the password : scanf



### 1.1 Alternative

1. use readelf -x <24(data)> to read the fixed values  
we found the pointer to the value in the rodata section
2. use readelf -x <15(rodata)> to read the value of the password.  
we found the password: scanf

## 2 When the password is found, delete the symbols with the command strip and use ddd without symbols

1. strip password\_1
2. open the program with ddd
3. with the console add a breakpoint in the main section(break @)
4. with the console run the program and display the values of the pointer

