

Assignment A1

CompSys

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How to run

Unzip the zip file. Open your terminal, go to src folder in the terminal and type make + ENTER to run compile file.c

To test the program type ./test.sh in the same terminal.

Implementation

1 x86 Programs

The following is how we have attempted to understand the conversion between Assembly code x86 to a C program with help from our book. 1

program 1

This program take a long (64 bit int), and test it against if it is negative, if it is then return the value else it negate it and return the negated value. the code is to finde in the file program1.c

Program2

We did not get done with this program, but it takes a long and a pointer to a arrays of longs, it loop over it and do some manipulations to the array, and return the pointer to the array.

GDB

For UTF8 CONT it holds that it return 1 iff we have a bit sequence like 10xxxxxx where the xs' are either 0 or 1. the only two values composed of 1 for UTF8 CONT are 128 | 64 and 128 + 64 but they except this.

it is the same for the other macros just with other bit sequence.

We did not get time to implement more tests, and our code has some bugs

for the macros.

We see that this is the case since the operation $x \mid y$ will return a bit sequence where all bits that are 1 in either x or y will be 1 or else 0. So as long as the new value

Testing

We did not get to testing the code. Sorry for that.