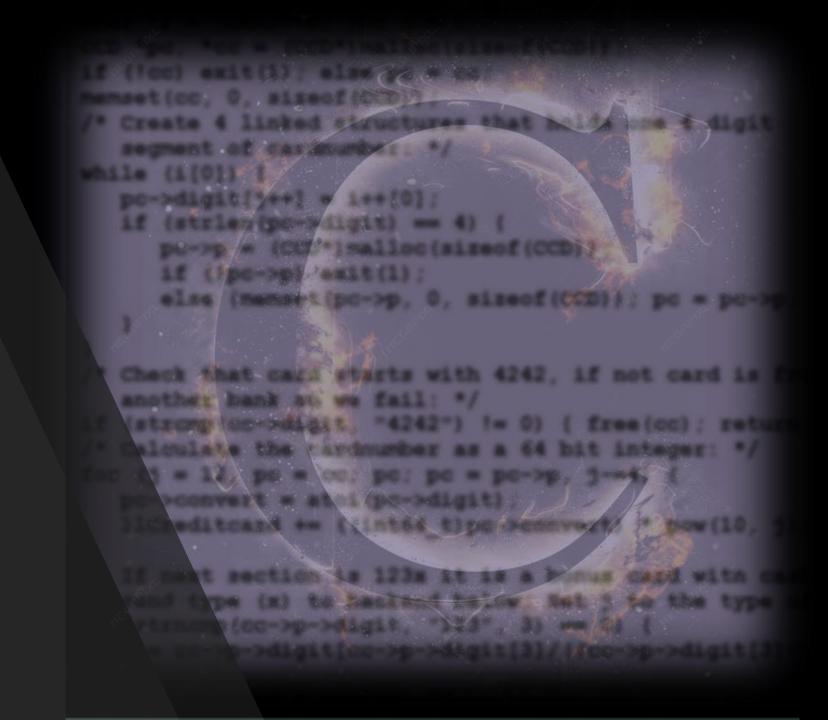


PG3401 C Programmering for Linux

Lecture 4 (week 05)

Pointers



Goals for this week

Learning to USE points (for simple things)

Understanding what a pointer is



Learning "just" pointers means we don't see the full picture this week — it will make slightly more sense next week when we learn about arrays and strings.

I recommend using the time only experimenting on the simple tasks, some students wish to make a large program already, but restrain yourselves and learn how to walk before you try to fly...

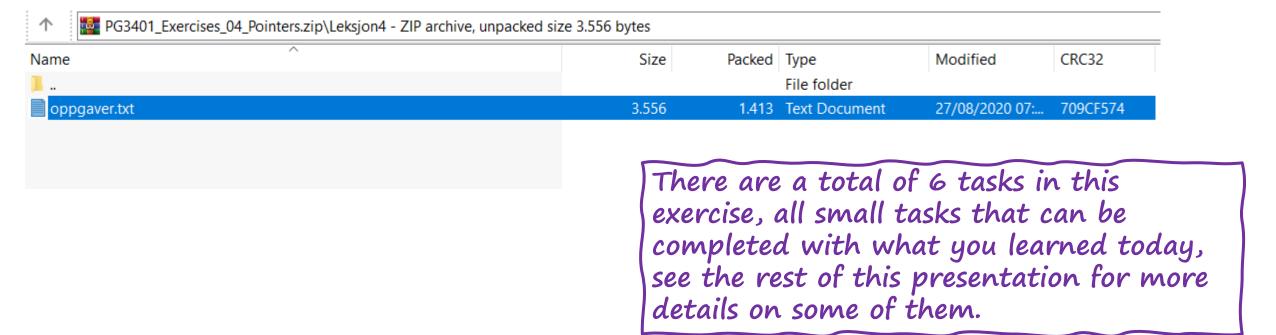


04_Pointers.zip



Practical

 Download the file PG3401_Exercises_04_Pointers.zip from Canvas, it contains a text file with some tasks





Practical

```
wget http://www.eastwill.no/pg3401/exercises_04.zip
unzip exercises_04.zip
ls
cd Leksjon4
cat oppgaver.txt
```

Follow the instructions

You can also download this from Canvas.



Address of variables (task 1)



Address of variables

 The first task is very simple, but take your time and recompile several times to see if those addresses

change – it is interesting

Start using the makefile on the last slide of today's lecture — the one marked with "use this makefile".

If you are not careful when typing the characters (or if you try to copy paste the text from Powerpoint — which will fail), this task will take 2 hours, if you simply type exactly what is written on the slide it will take a few minutes! ©





Bubble sort (task 4)



Bubble sort

• "Bubble sort" is a sorting algorithm, you can use google to find out how this works – this is a good task to learn how to use google



Sorting strings (task 6)



Sorting strings

Try to swap just pointers and not copying the strings

 This is still a quite basic task, but using pointers as well as simple sorting algorithms such as this is an essential skill we will build on in the coming weeks

