- Introduction to the course.
- Introduction to operating systems (Chapter 1).
- Note: The slides for the course can be accessed via blackboard.

It is quite early for an exercise session, you will learn a lot in the next months for answering the following question more properly. However, try to prepare for the exercise session on Thursday the following exercises from the textbook:
1.1, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.10, 1.13, 1.14, 1.15, 1.16, 1.17, 1.18, 1.19, 1.21, 1.22, 1.24, 1.25

In addition you can start analysing the following C source code. Discuss what it does. An introduction to C will be given next week.

```
#include "dm510_msgbox.h"
#include <stdlib.h>
#include <string.h>

typedef struct _msg_t msg_t;

struct _msg_t{
  msg_t* previous;
  int length;
  char* message;
};

static msg_t *bottom = NULL;
static msg_t *top = NULL;

int dm510_msgbox_put( char *buffer, int length ) {
  msg_t* msg = malloc(sizeof(msg_t));
  msg->previous = NULL;
  msg->length = length;
  msg->message = malloc(length);
  memcpy(msg->message, buffer, length);

  if (bottom == NULL) {
    bottom = msg;
    top = msg;
  } else {
    /* not empty stack */
    msg->previous = top;
    top = msg;
  }
  return 0;
}

int dm510_msgbox_get( char* buffer, int length ) {
  if (top != NULL) {
    msg_t* msg = top;
    int mlength = msg->length;
    top = msg->previous;

    /* copy message */
    memcpy(buffer, msg->message, mlength);

    /* free memory */
    free(msg->message);
    free(msg);

    return mlength;
  }
  return -1;
}

int main(int argc, char** argv) {
  char *in = "This is a stupid message.";
  char msg[50];
  int msglen;

  /* Send a message containing 'in' */
  dm510_msgbox_put(in, strlen(in)+1);

  /* Read a message */
  msglen = dm510_msgbox_get(msg, 50);

  return 0;
}
```