



# Homework

# Escaping string in SQL commands

- Create a program in C/C++ escaping strings
  - Do not use libraries for escaping, UTF8 coding and other core activities
- Command line:
  - `./program input_file output_file`
  - Default input file: `input.txt`
  - Default output file: `commands.sql`

# INPUT FILE

- A sequence of strings
- Each string on one line
  - Generally line ends can be Win, Unix or Mac
    - In line ends are mixed do what you want, but document well your behavior
- All characters allowed except for 0x00, 0x0A, 0x0D
  - String is skipped if contains incorrect chars
    - Also incorrect UTF chars etc.
- No limit for a string/line length
- No limit for number of strings/size of file
- UTF8 coding (multibyte)
- Program may stop if string does not fit into available memory

# OUTPUT

- Output file:
  - Escaped commands to enter strings into a table
  - Use table 's'
    - `INSERT INTO S VALUES ('string');`
  - One command per string in input file

# Escape special characters

- `\ -> \\`
- `“ -> \”`
- `‘ -> \’`
- `Ctrl-Z -> \Z`

# Samples

- Sample input
  - Test
  - Test is 'nice'
  - Test is not \'nice'
  - "Ahoj"
- Sample output
  - INSERT INTO S VALUES ('Test' );
  - INSERT INTO S VALUES ('Test is \'nice\'' );
  - INSERT INTO S VALUES ('Test is not \\\'nice\'' );
  - INSERT INTO S VALUES ('\''Ahoj\'' );