My notes from K.N. King's "C Programming A Modern Approach" 2nd version

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Chapter 1

Note

In this material I will go over everything from book, trying to summarize every note-worthy subject. I will do it, while learning Latex, so good luck to me.

Contents

Chapter 2

C Fundamentals

2.1   Steps of Executing a C Program

Automated proccess:

1. **Preprocessing** - Preprocessor is executing directives (they begin with #).

2. **Compiling** - Compiler translates program into machine instructions (object code).

3. **Linking** - Linker combines object code and code needed for execution of the program.

2.2   The Genereral Form of a Simple Program

Simple C programs have this form:

directives

```
int main(void)
{
    statements
}
```

Directives - Begin with '#' symbol, they state what headers include to program.

Functions - They are segments of code that take arguments, and returns (or not) a value. Only `main` function is required.

Statements - Commands to execute, mostly end with semicolon.

String literal - Series of characters enclosed in double quotation marks, e.g. `"Hello world!"`.

New-line character - `\n` is an escape sequence, which advances to the next line of output.

Comments - Are ommited in program execution, can be used to comment single line e.g. `/* Comment */`, or block of lines. From C99 we can use one line comments e.g. `// Comment`.

2.3 Variables and Assigments

Variable - Place to store calculation's output, for using in future.

Types - For now, there are two types of variables:

- `int` - Integer types, can store quite big whole number, but that depends on your computer's architecture.

- `float` - Can store bigger numbers, as well as digits after decimal point.