

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.

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# Chapter 2

## C Fundamentals

### 2.1 Steps of Executing a C Program

Automated process:

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 General 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 omitted 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 Assignments

**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.