

Outline for April 4, 2023

Reading: zyBooks text §1, 2.20; Handouts 3, 4

Assignments: Homework #1, due April 15, 2024

1. Example program 2: *fahr1.c*
 - (a) Program (*main*, **return** or *exit* for *main*)
 - (b) Declarations (**int**, **register int**)
 - (c) Body (**while**, *printf*)
 2. Variable names
 3. Basic types
 - (a) **int**, **long** vs. **short**, **unsigned** vs. **signed**
 - (b) **char**, treated like an **int** that holds 1 character
 - (c) **float**, **double**
 - (d) Type casting
 4. Basic operators
 - (a) arithmetic: **+**, **-**, *****, **/**, **%**
 - (b) **%** defined so that $n \% p = r$ implies $n = ap + r$ for some a
 - (c) $5 \% -2$ can be 1 ($5 = (-2) \times (-2) + 1$) or -1 ($5 = (-3) \times (-2) + (-1)$)
 5. Associativity of operations
 - (a) Difference between associativity of operations and order of evaluation
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Papers

3. Compiling and Executing Your Program, *compiling.pdf*
4. Writing a Program, *writingprogram.pdf*