Übungen zu Systemnahe Programmierung in C (SPiC) – Sommersemester 2022

Übung 4

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Lehrstuhl für Verteilte Systeme
und Betriebssysteme

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UNIVERSITÄT
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TECHNISCHE FAKULTÄT

Vorstellung Aufgabe 2

Zeiger & Felder

Vertiefung: Zeiger

- Variable: `uint8_t x`
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- Adressoperator: `&x`
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02 uint8_t b = 42;
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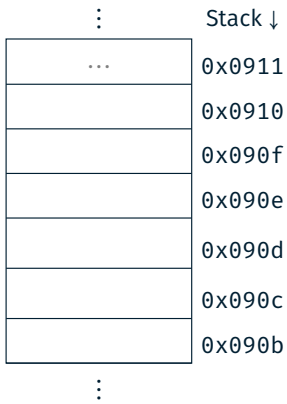

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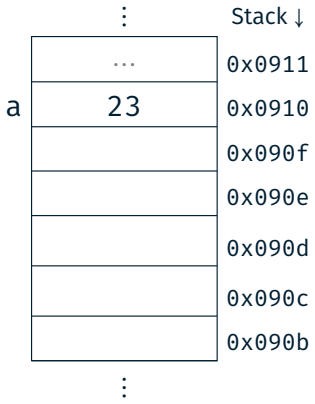

Achtung: Die genaue Anordnung der Variablen auf dem Stack ist abhängig vom Übersetzer und den gewählten Optimierungen!

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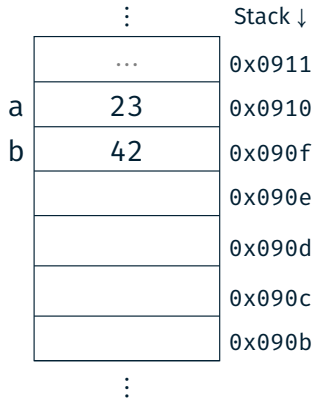

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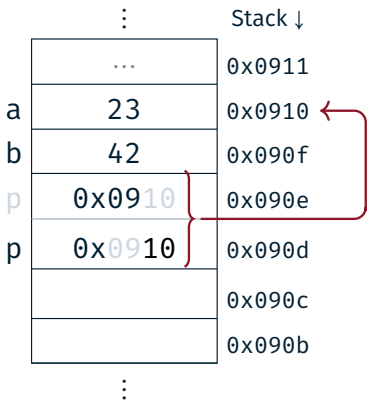

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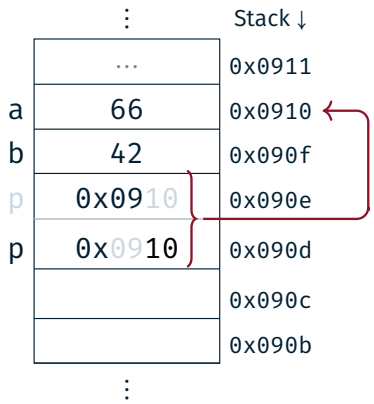

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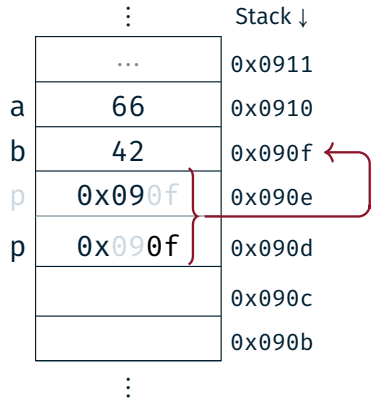

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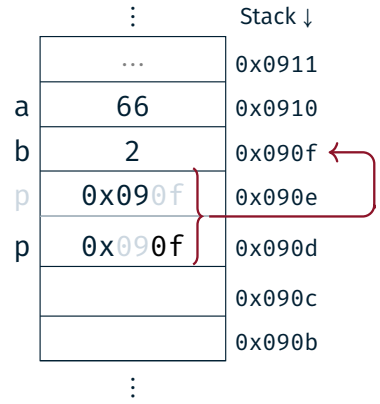

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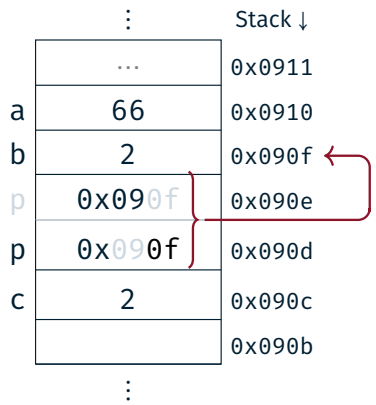

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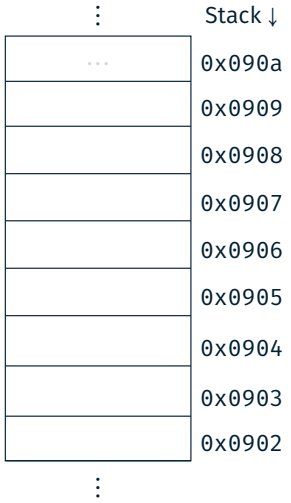

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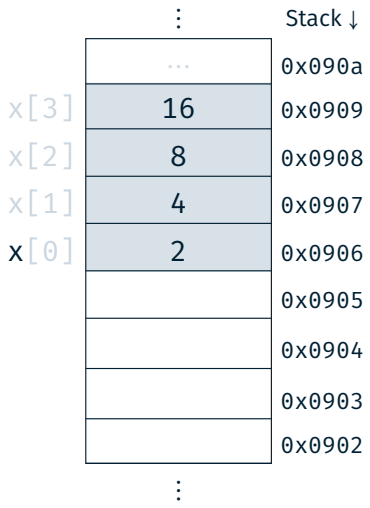

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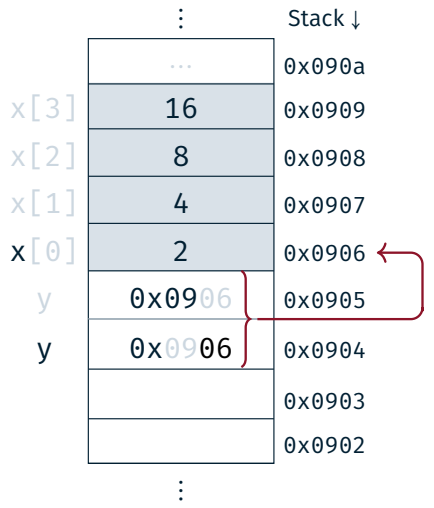

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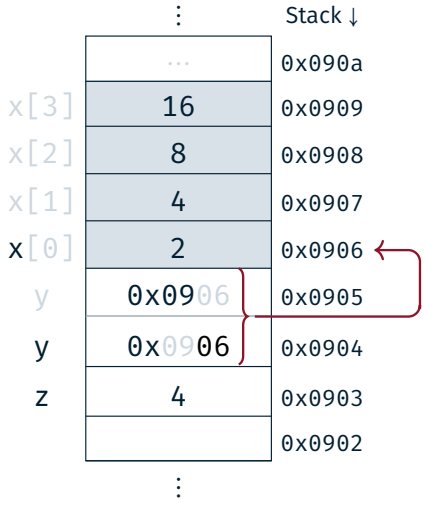

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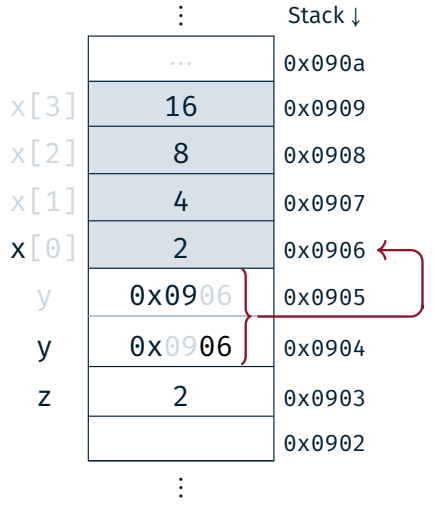

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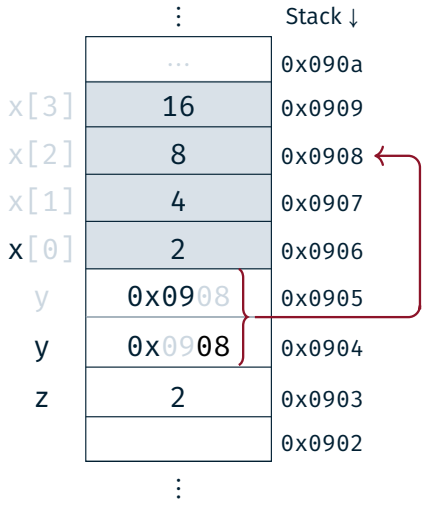

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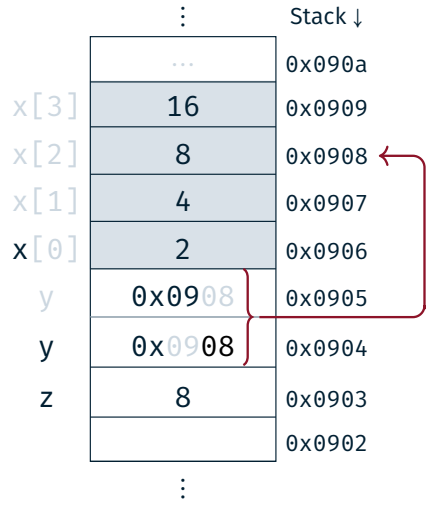

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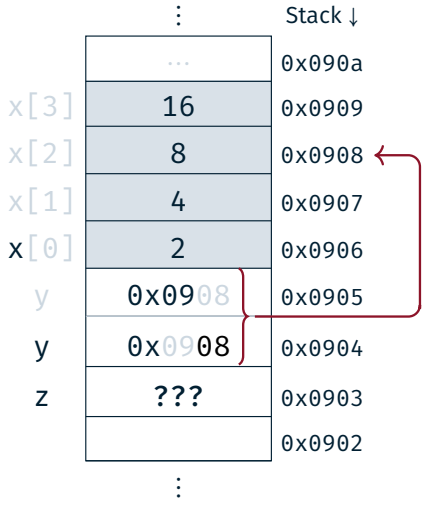

Hands-on: Zeiger

Kein Screencast

Hands-on: Zeiger, Felder & Strukturen

- Call-by-Value vs. Call-by-Reference
- Zeiger und Felder
- Zeigerarithmetik
- `struct` für GPS-Koordinaten
- Feld von GPS-Koordinaten
- Funktionszeiger

Kompilierbar für das SPiCboard (serielle Konsole), den SPiCsim oder Linux

Quellcode:
`https://sys.cs.fau.de/lehre/SS22/spic/uebung/material/pointer.c`