



Data representation

Laura Vasilescu (laura@rosedu.org)

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ROSEdu Summer Workshops

Overview

1 C Data Types

2 Data Structures

3 Signed vs. Unsigned

4 gdb intro

C Data Types

C Data Types

- char

C Data Types

- char
- short

C Data Types

- char
- short
- int

C Data Types

- char
- short
- int
- long

C Data Types

- char
- short
- int
- long
- long long

C Data Types

- char
- short
- int
- long
- long long
- float

C Data Types

- char
- short
- int
- long
- long long
- float
- double

C Data Types

- char
- short
- int
- long
- long long
- float
- double
- char *

C Data Types

- char
- short
- int
- long
- long long
- float
- double
- char *
- int *

C Data Types

- char
- short
- int
- long
- long long
- float
- double
- char *
- int *
- void *

C Data Types

- char
- short
- int
- long
- long long
- float
- double
- char *
- int *
- void *

demo

C Data Types

- char: 1
- short: 2
- int: 4
- long: 4 sau 8
- long long: 8
- float: 4
- double: 8
- char *: 4 sau 8
- int *: 4 sau 8
- void *: 4 sau 8

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ex. 1

Data Structures

- sizeof – not that reliable
- alignment; depends on the architecture

Data Structures

- sizeof – not that reliable
- alignment; depends on the architecture
- be careful!

ex. 2

ex. 3

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ex. 1

ex. 2

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gdb