

Session 2

DataTypes & Variables

Data types

Name \Rightarrow نامه \downarrow عنوان

age \Rightarrow عمر \rightarrow سن

truthy answer

are you okay? Yes \rightarrow true
false \rightarrow false

Data types

boolean	numbers	text
true false	short int float double long	char = character string = text / words

2 bytes \Leftarrow short \rightarrow -32, ..., 32, ...

4 bytes \Leftarrow int \rightarrow

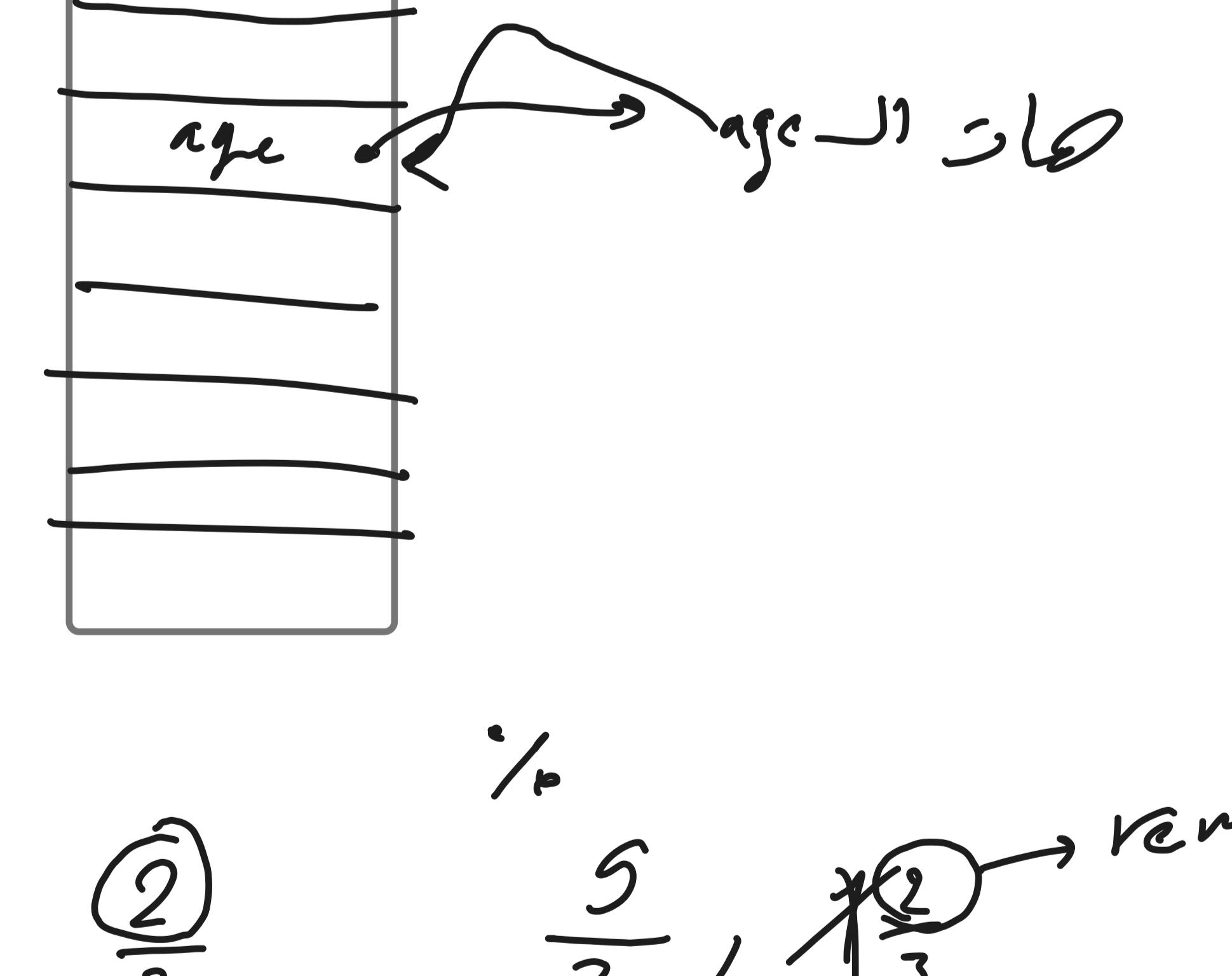
RAM 8 bytes \Leftarrow long \rightarrow bytes $\times 8 = \text{bits}$

min number = $-2^{(\text{bits} - 1)}$
Max number = $2^{(\text{bits} - 1)} - 1$

float, double

point / decimal \Rightarrow values

Static



$$\frac{2}{3} \% \frac{5}{3}, \frac{2}{3} \rightarrow \text{remainder}$$

$$\frac{2}{4} 0.5$$

Casting ??

int \Rightarrow float

covert implicit \rightarrow auto.

convert explicit \rightarrow manual.

Conditions