

CSE 20

Lecture 3: Representing integers in different bases (contd...)

Course Website

- Course details is available online:
<http://cseweb.ucsd.edu/classes/wi14/cse20-a/>
- Regular announcements will be made on the webpage
- First Assignment is uploaded
- Solutions to the assignment will be uploaded on Monday
- Discussion forum set up in Piazza

Quizzes

- There will be around 6 quizzes (5% each)
- Most of them will be in class.
- Some questions will be asked on clickers.
- Total marks for clickers will be 5%. (2% for attendance and 3% for correctness).
- First quiz will be on Friday (17th January) in class.

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Base b representation of a number x is the unique way of writing

$$x = x_0 * b^0 + x_1 * b^1 + \dots + x_k * b^k,$$

where $x_0, x_1, \dots, x_k \in \{0, 1, \dots, (b - 1)\}$

Algorithm for finding representation in base b

We can find a representation in base b using **GREEDY METHOD**.

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$$N = y_0 * b^0 + y_1 * b^1 + \dots + y_k * b^k.$$

Is it possible that there exists $(\exists) i$ such that $x_i \neq y_i$?