

Friday questions week 5

1. Which are the two forms of locality?

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2. What is meant by a cache block?

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3. A cache is divided into a number of sets, and when an address is searched all rows in a particular set are checked to see if that row contains the searched address and needed data. What is a cache called if it is described as follows:

- the cache has only one set
- each set has four rows
- the number of sets and rows are equal

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4. When there are multiple rows in a set, are they searched in sequence or are the hardware address comparators duplicated so that they work in parallel?

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5. What is the cache block size on our POWER machine?

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6. Modern optimizing compilers use a representation which makes it relatively easy analyze which statement has modified a variable. What is this representation called?

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7. What is the purpose of instruction scheduling?

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