Hello, everyone. We are team2, Lee Jeong-yun and Lee In-Sun who will present Memory hierarchy simulation

This is our contents.

How to calculate hit rate?

Hit rate is number of cache hit divided by total access of the cache

Miss rate is one minus hit rate.

We chose exchange rate. Because of these day's rapid increasing exchange rate, we wanted to compare various exchange rate.

The data is closing price of the foreign exchange market in every single day for about 30 years.

We collected the data from investing.com.

The period of data is from 1981 to 2021. In total 10,506 days.

We will use 2 columns by 2-dimensional array.

These are our hypothesis and assumptions.

Our model will get input about selecting dataset from user and return the ending price of the day.

In continuous period searching, the hit rate at the upper level might be greater than the lower level.

In accessing specific day or period several times again and again, the hit rate at the upper-level might be greater than lower-level.

In referencing random date, the hit rate of the lower-level might be greater than the upper-level.

We made a 4 level of cache and 1 disk for containing whole data.

This is general memory hierarchy.

This is our memory hierarchy visual model for understanding.