QUESTION & ANSWER PROBLEM

I came across the question & answer problem being solved by the WATSON supercomputer recently from a guest lecture.

SCIENTIFIC/ENGINEERING PROBLEM: Question & Answer Problem.

ARCHITECTURE: Watson's corpus size was 400 terabytes of data—encyclopedias, databases and so on. Watson was disconnected from the Internet. Everything it knows about the world came from the corpus. 90 IBM Power 750 servers, 80 trillion operations per second (teraflops).

- 2880 POWER7 cores (3.555GHz chip), four threads per core.
- 500GB per sec on-chip bandwidth (between the cores on a chip).
- 10Gb Ethernet network.
- 15TB of RAM.
- 20TB of disk, clustered.

SUPERCOMPUTER: The Question & Answer Problem was solved using the WATSON supercomputer. The computer is not currently on the Top 500 list of fastest computers, but if the reported speed is correct it would be ranked around number 94.

PERFORMANCE: WATSON supercomputer competed on the quiz show Jeopardy!, in the show's only human-versus-machine match-up to date. Watson beat Brad Rutter, the biggest all-time money winner on Jeopardy! , and Ken Jennings, the record holder for the longest championship streak (74 wins). Average time to handle a question: **three seconds**.

The various domains used for building for WATSON are information retrieval, natural language processing, parallel computing, machine learning.

In future WATSON supercomputer could be used for identifying weather patterns due to its data analysis capabilities.

REFERENCES:
http://en.wikipedia.org/wiki/Watson_(computer)
http://www.linuxjournal.com/content/system-administration-ibm-watson-supercomputer
http://www.govtech.com/technology/Watson-Contest.html.