Computer Memory Hierarchy

small size
small capacity

processor registers
very fast, very expensive

power on

immediate term

small size
small capacity

processor cache
very fast, very expensive

medium size
medium capacity

power on
very short term

random access memory
fast, affordable

small size
large capacity

power off
short term

flash / USB memory
slower, cheap

large size
very large capacity

power off
mid term

hard drives
slow, very cheap

large size
very large capacity

power off
long term

tape backup
very slow, affordable