There are several classic problems related to memory on Linux
systems.

1) There are some motherboards that will not cache above
   a certain quantity of memory. If you have one of these
   motherboards, your system will be SLOWER, not faster
   as you add more memory. Consider exchanging your
   motherboard.

All of these problems can be addressed with the "mem=XXXM" boot option
(where XXX is the size of RAM to use in megabytes).
It can also tell Linux to use less memory than is actually installed.
If you use "mem=" on a machine with PCI, consider using "memmap=" to avoid
physical address space collisions.

See the documentation of your boot loader (LILO, grub, loadlin, etc.) about
how to pass options to the kernel.

There are other memory problems which Linux cannot deal with. Random
corruption of memory is usually a sign of serious hardware trouble.
Try:

* Reducing memory settings in the BIOS to the most conservative
  timings.

* Adding a cooling fan.

* Not overclocking your CPU.

* Having the memory tested in a memory tester or exchanged
  with the vendor. Consider testing it with memtest86 yourself.

* Exchanging your CPU, cache, or motherboard for one that works.