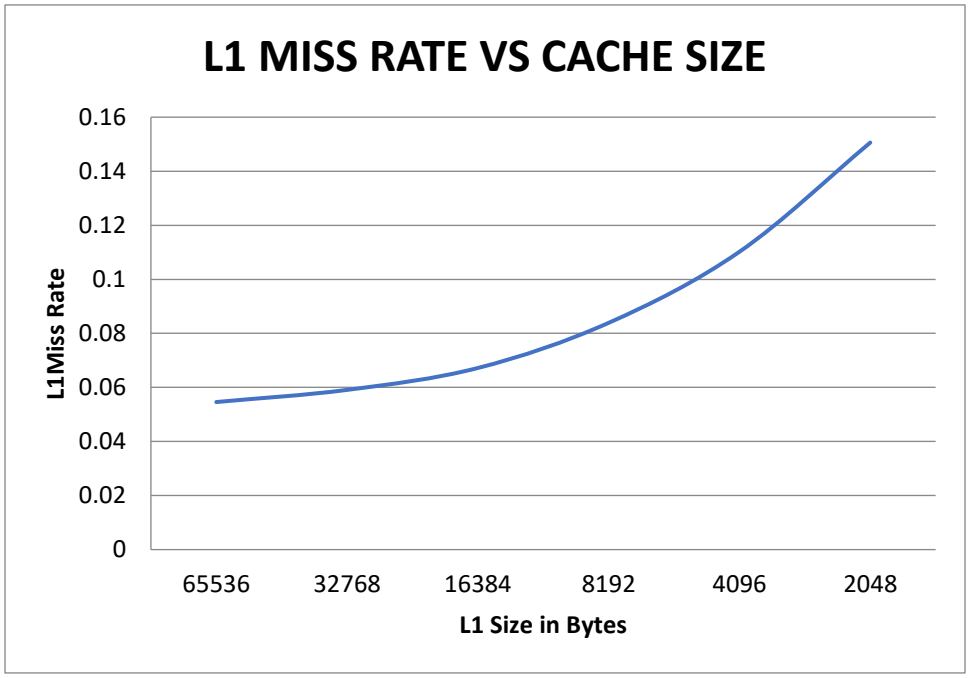
REPORT

L1 CACHE SIZE V/S MISS RATE:

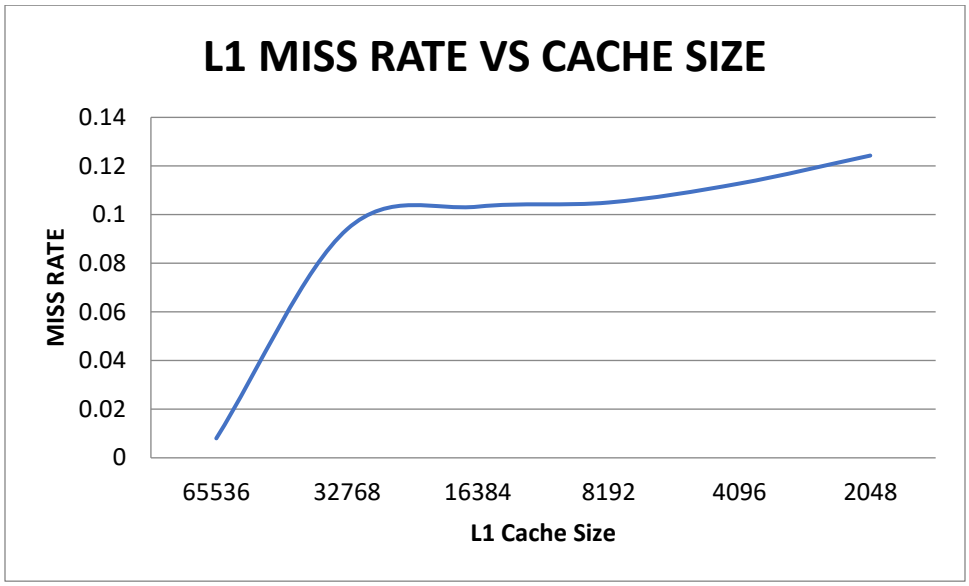
Configuration: -

- L1 BLOCKSIZE=16
- L1 SIZE=16384
- L1 ASSOCIATIVITY=1

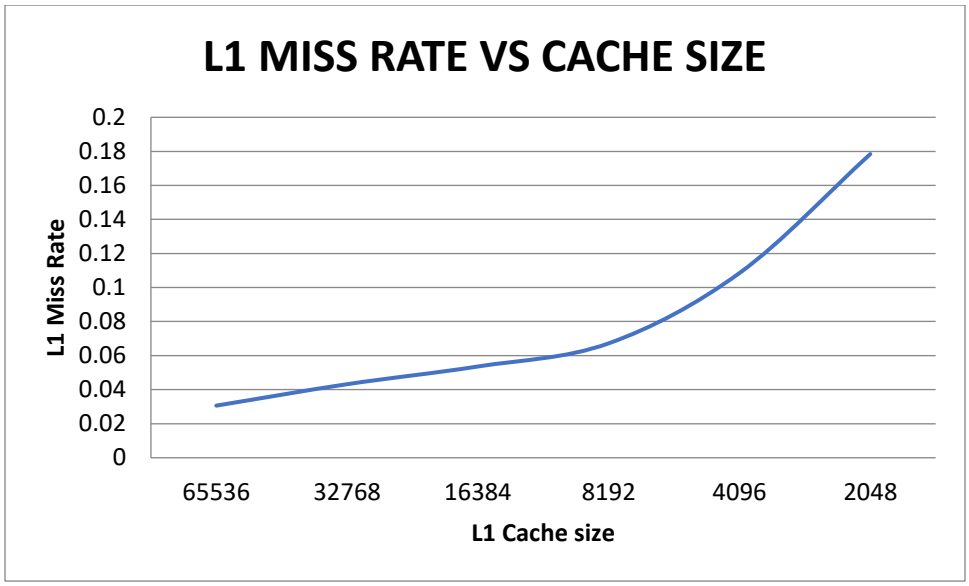
1. Trace File - gcc_trace



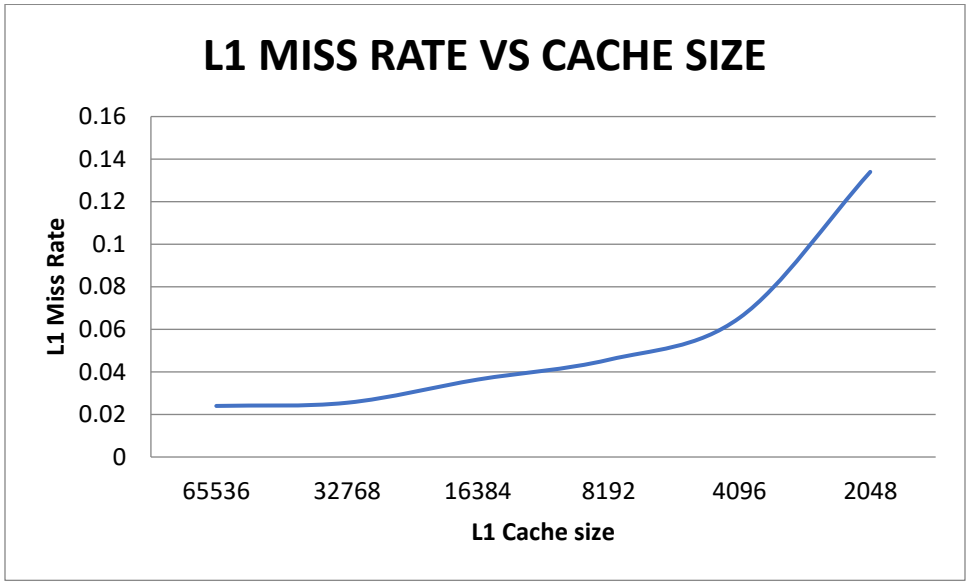
2. Trace File – go_trace



3. Trace File – perl_trace



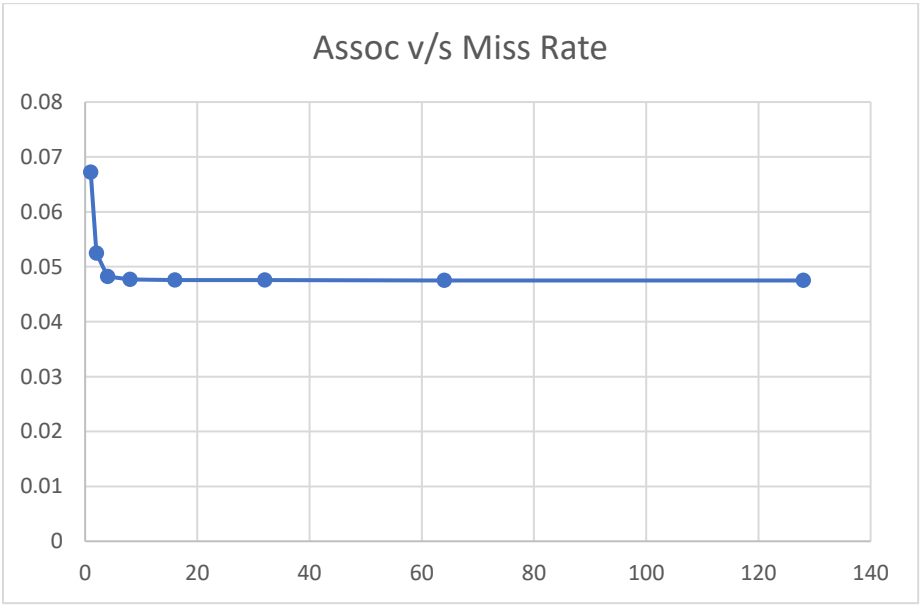
4. Trace File – vortex_trace



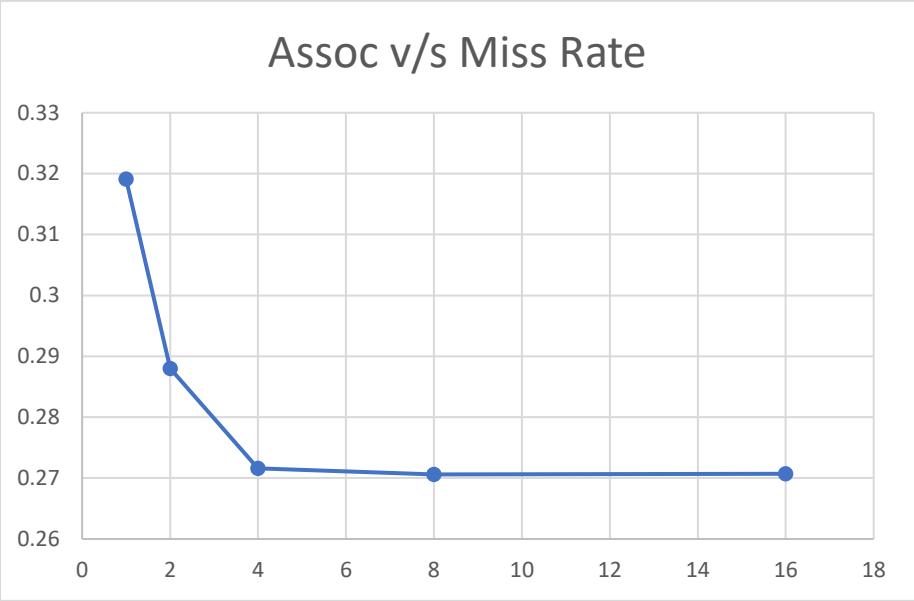
As seen from the observation, Miss rate of L1 cache decreases with increase in cache size. This can be justified as cache size increases the capacity increases therefore number of misses will reduce thereby decreasing miss rate.

ASSOCIATIVITY V/S MISS RATE:

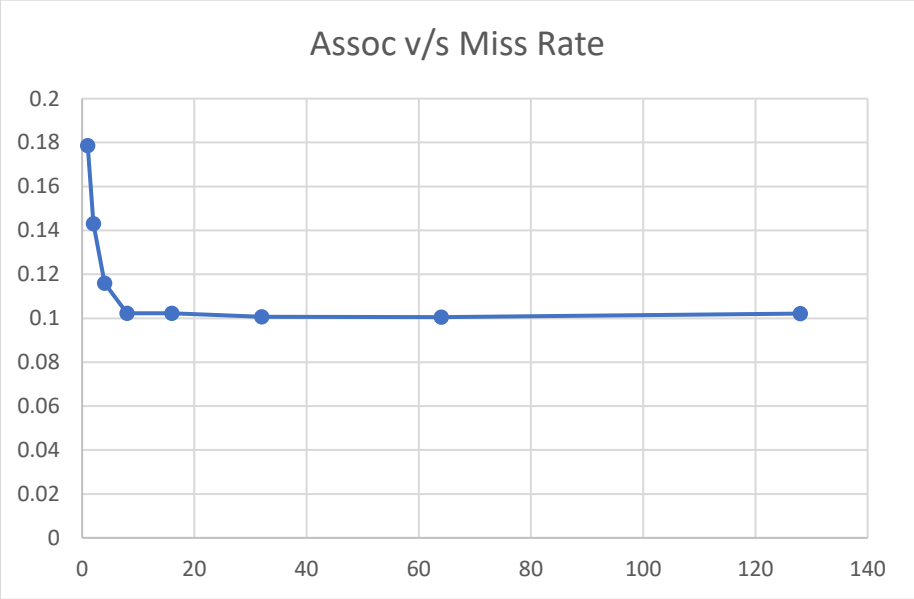
GCC TRACE:



GO TRACE:



PERL TRACE:



As associativity increases, the miss rate decreases and then becomes constant.