

# Report Assignment-3

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## Hit and Miss Rate

The total number of hits and misses counted are listed in the table below:

File Name	Direct Mapped Cache			Set Associative Cache		
	Hits	Miss	%Hits	Hits	Miss	%Hits
gcc.trace	483504	32179	93.76	483871	31812	93.81
gzip.trace	320883	160161	66.7	320883	160161	66.7
twolf.trace	476770	6054	98.74	476844	5980	98.76
swim.trace	280738	22455	92.6	280825	22368	92.62
mcf.trace	7505	719725	1.03	7508	719722	1.03

Replacement policy used = LRU

## Observations

1. The number of hits are more in set associative cache then direct mapped cache.
2. Direct mapped cache is relatively faster because even if the index matches, we have to check for multiple columns.
3. Set associative cache is more difficult to implement because of the replacement policies involved.