

SCRIPT FOR BENCHMARK

We have used “*Perf*” for obtaining the value of count of miss events. By running the perf command in refrate folder of specific benchmark we have obtained the value of counts.

In the command of perf following flags are used for following reason:

- I : to print count of delta after every 200ms
- o : to redirect the output to the specified file
- e : to specify name of the events
- taskset -c 0 : so that the bechmark will run only on core 0 of the processor

We have taken following events in considration while obtaining count

1. cpu-cycles:u
2. instructions:u
3. branch-misses:u
4. L1-icache-load-misses:u
5. L1-dcache-load-misses:u
6. LLC-load-misses:u
7. LLC-store-misses:u
8. iTLB-load-misses:u
9. dTLB-load-misses:u
10. dTLB-store-misses:u
11. branch-load-misses:u

Command used for getting data from different benchmark is as follow:

1. For 531.deepsjeng r :-

```
sudo perf stat -I 200 --no-big-num -o deepsjeng.txt -e cpu-cycles:u,instructions:u,branch-misses:u,L1-icache-load-misses:u,L1-dcache-load-misses:u,LLC-load-misses:u,LLC-store-misses:u,iTLB-load-misses:u,dTLB-load-misses:u,dTLB-store-misses:u,branch-load-misses:u -- taskset -c 0 bash run.sh
```

2. For 523.xalanabmk_r :-

```
sudo perf stat -I 200 --no-big-num -o xalanabmk.txt -e cpu-cycles:u,instructions:u,branch-misses:u,L1-icache-load-misses:u,L1-dcache-load-misses:u,LLC-load-misses:u,LLC-store-misses:u,iTLB-load-misses:u,dTLB-load-misses:u,dTLB-store-misses:u,branch-load-misses:u -- taskset -c 0 bash run.sh
```

3. For 520.omnetpp_r :-

```
sudo perf stat -I 200 --no-big-num -o omnetpp.txt -e cpu-cycles:u,instructions:u,branch-misses:u,L1-icache-load-misses:u,L1-dcache-load-misses:u,LLC-load-misses:u,LLC-store-misses:u,iTLB-load-misses:u,dTLB-load-misses:u,dTLB-store-misses:u,branch-load-misses:u -- taskset -c 0 bash run.sh
```

4. For 526.blender_r :-

```
sudo perf stat -I 200 --no-big-num -o blender.txt -e cpu-cycles:u,instructions:u,branch-misses:u,L1-icache-load-misses:u,L1-dcache-load-misses:u,LLC-load-misses:u,LLC-store-misses:u,iTLB-load-misses:u,dTLB-load-misses:u,dTLB-store-misses:u,branch-load-misses:u -- taskset -c 0 bash run.sh
```

5. For 511.povray_r :-

```
sudo perf stat -I 200 --no-big-num -o povray.txt -e cpu-cycles:u,instructions:u,branch-misses:u,L1-icache-load-misses:u,L1-dcache-load-misses:u,LLC-load-misses:u,LLC-store-misses:u,iTLB-load-misses:u,dTLB-load-misses:u,dTLB-store-misses:u,branch-load-misses:u -- taskset -c 0 bash run.sh
```

6. For 507.cactuBSSN_r :-

```
sudo perf stat -I 200 --no-big-num -o cactuBSSN.txt -e cpu-cycles:u,instructions:u,branch-misses:u,L1-icache-load-misses:u,L1-dcache-load-misses:u,LLC-load-misses:u,LLC-store-misses:u,iTLB-load-misses:u,dTLB-load-misses:u,dTLB-store-misses:u,branch-load-misses:u -- taskset -c 0 bash run.sh
```