Generating traces:

After downloading pin:

Set environment:

set INTEL\_JIT\_PROFILER /home/intel\_lab14/Downloads/pin

1) make necessary changes in pin-3.24-98612-g6bd5931f2-gcc-linux/source/tools/Memory/allcache.cpp file

2) run: cd pin-3.24-98612-g6bd5931f2-gcc-linux/source/tools/Memory

3) run: make allcache.test

One folder will be created and allcache.so file will be created.

4) find normalization factor:

Run this command to generate traces with time

time ../../../pin -t obj-intel64/allcache.so -- ./benchmark\_1.out

Take note of time and apply normalization then update allcache.cpp and run following command to generate final traces.

5) ../../../pin -t obj-intel64/allcache.so -- ./benchmark\_3.out

Then one file named benchmark\_3.out will be generated having traces.

Then give those traces to simulator.

# cmake out of source build  
mkdir build  
cd build  
cmake ..  
  
# Build dramsim3 library and executables  
make –j4

Command to run

./build/dramsim3main configs/DDR4\_8Gb\_x8\_3200.ini -c 1000000000 -t sample\_trace.txt