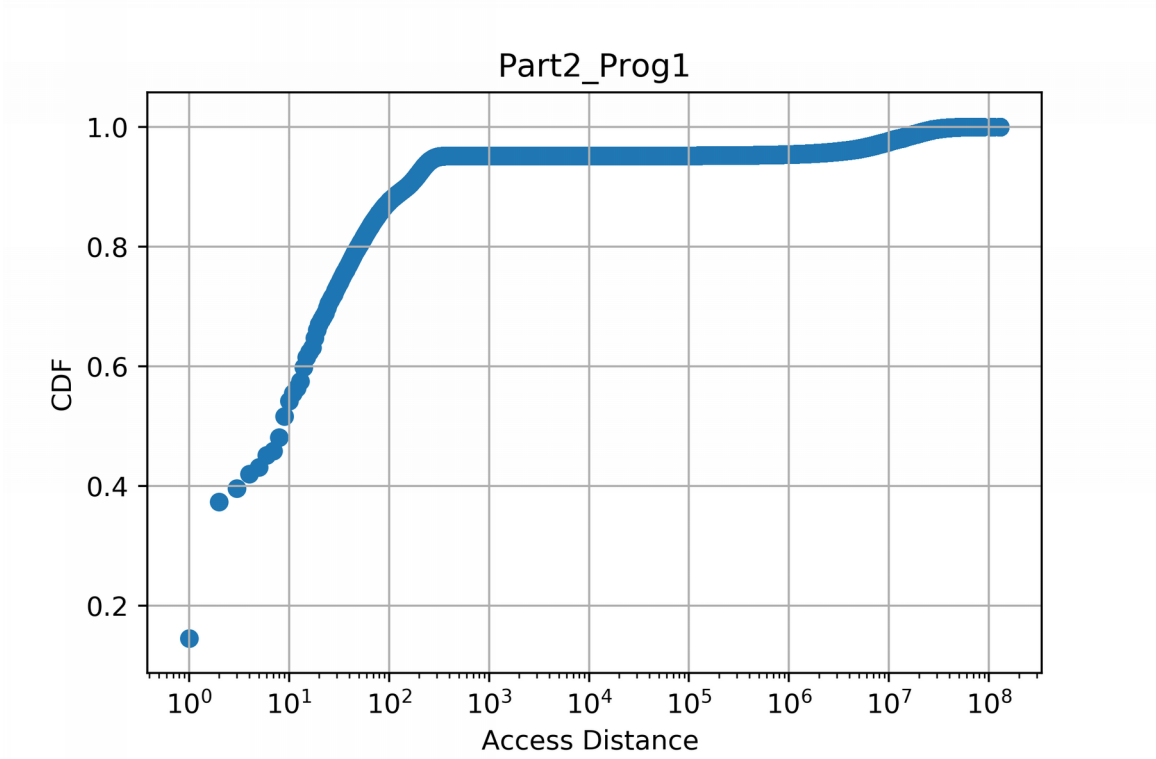
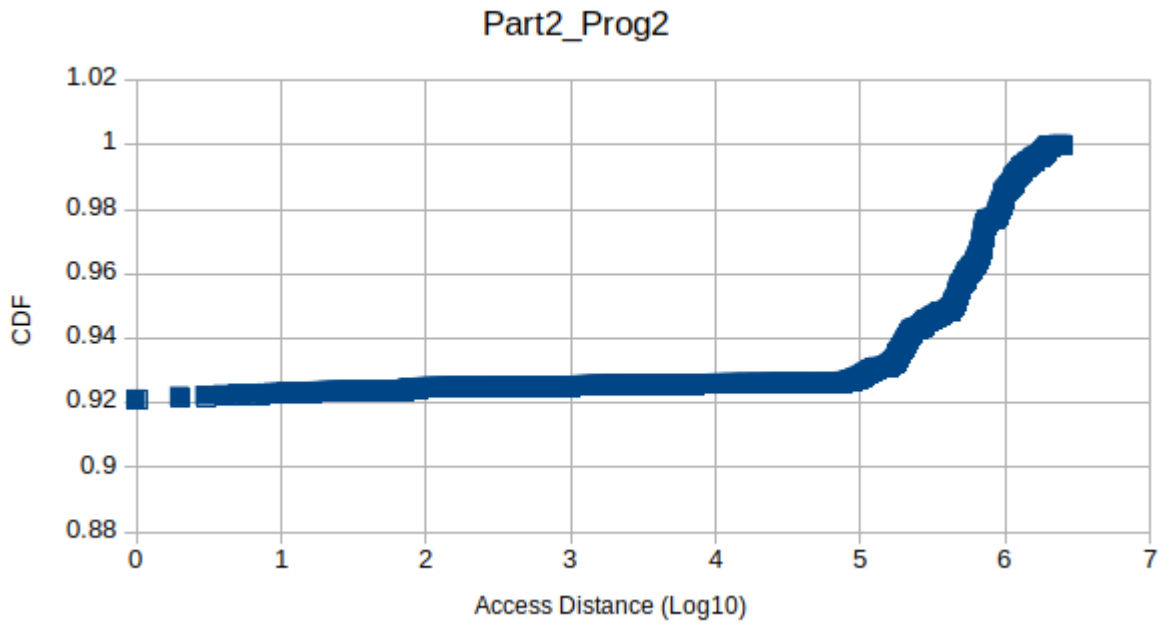
Assignment 2 [CS622]
Group 5

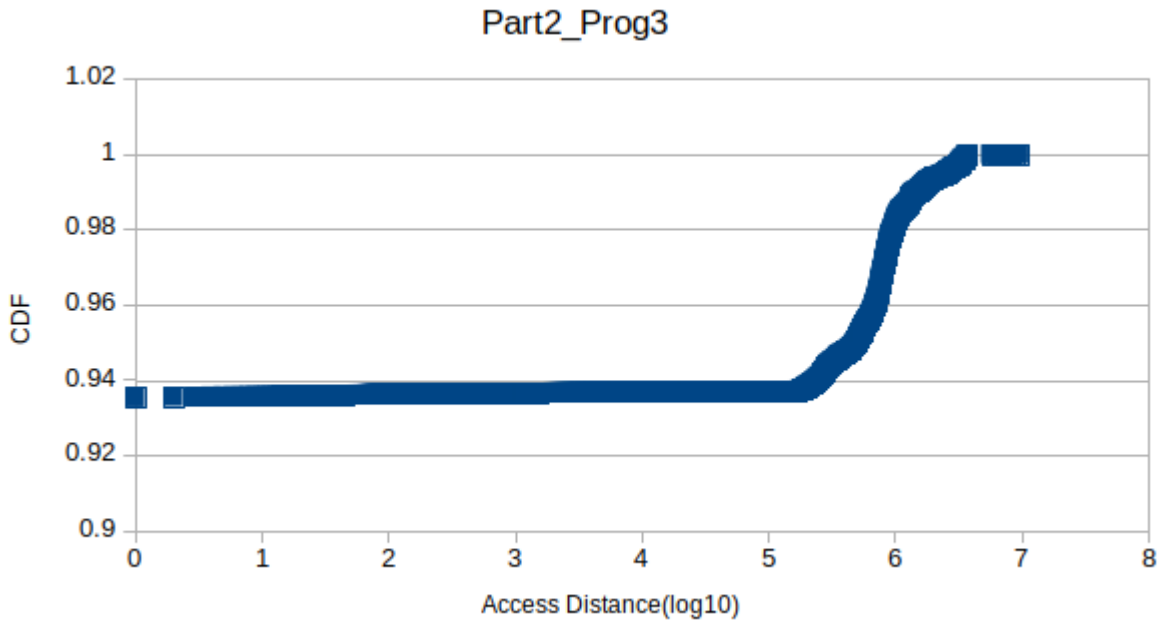
Part 1

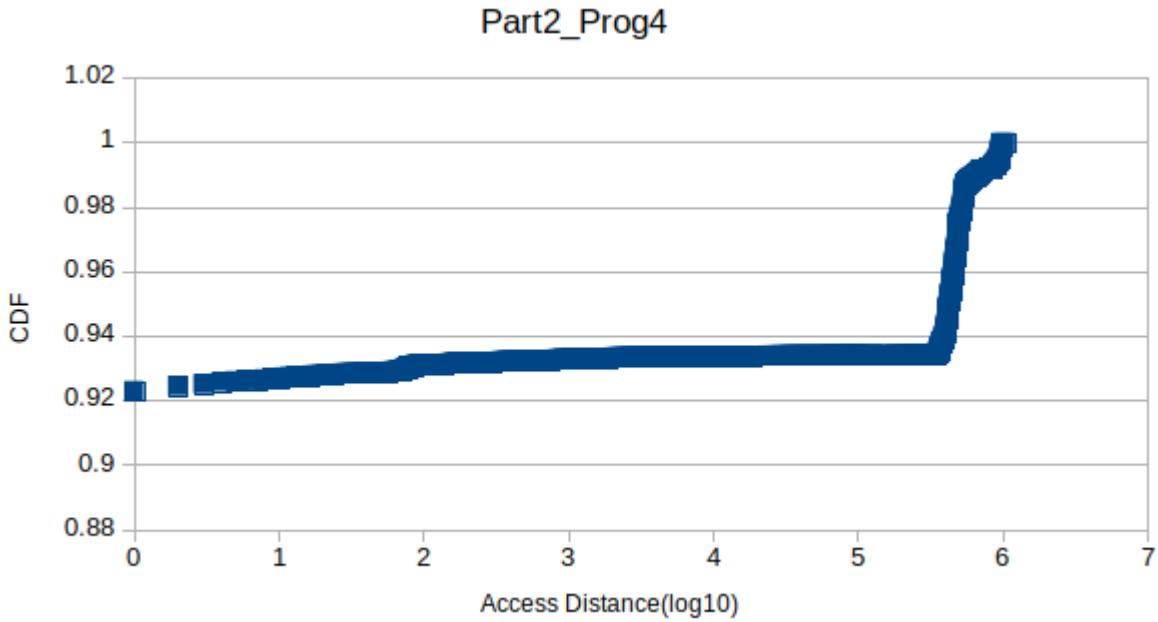
Program	No. of Machine Accesses
Prog1	128991501
Prog2	2510676
Prog3	9461123
Prog4	1064975

Part 2

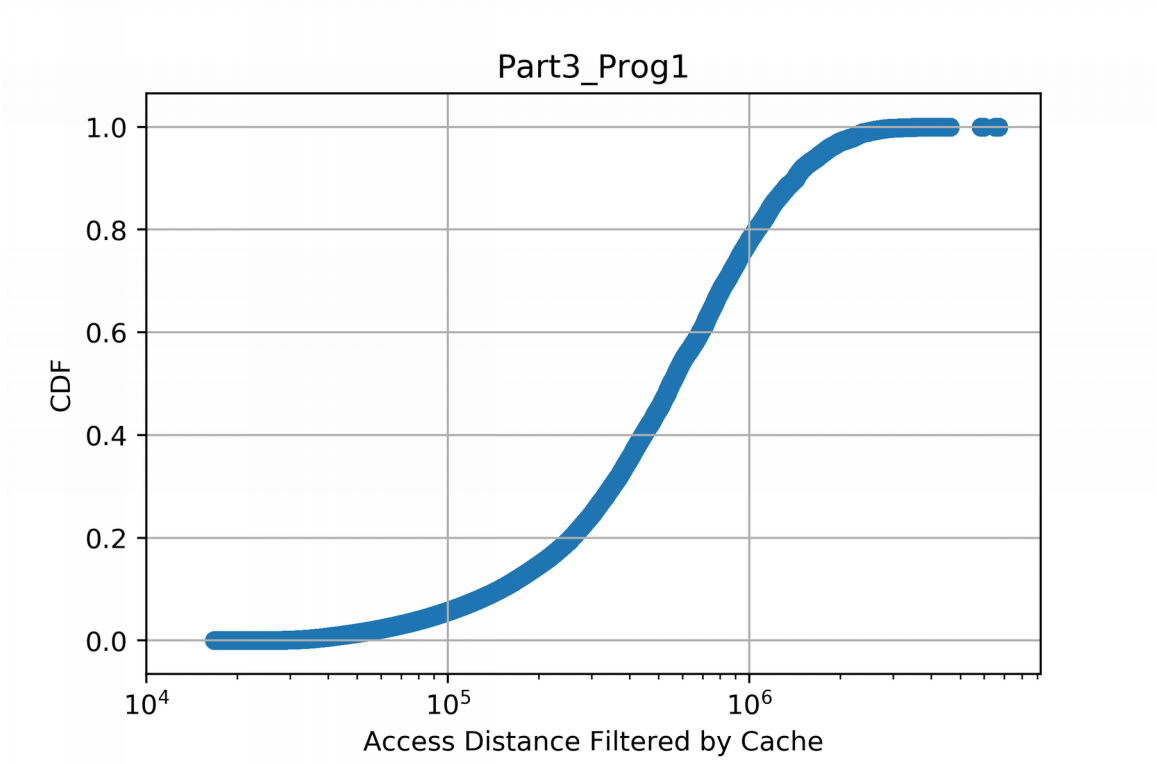


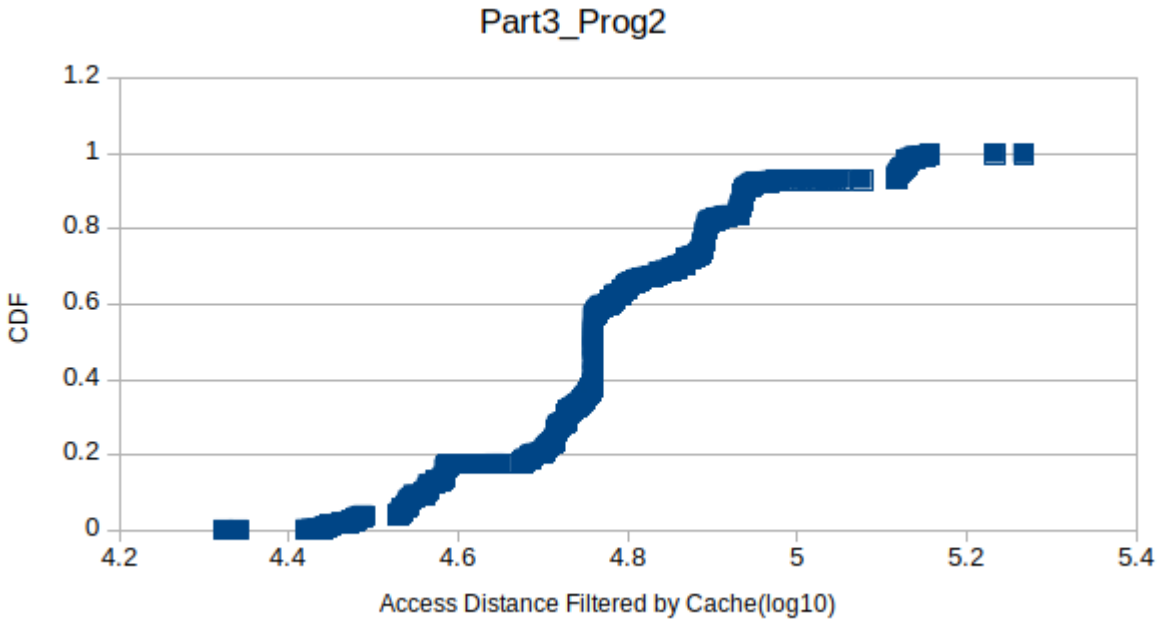

Part2_Prog2
1.02
1
0.98
0.96
0.94
0.92
0.9
0.88
CDF
0
1
2
3
4
5
6
7
Access Distance (Log10)

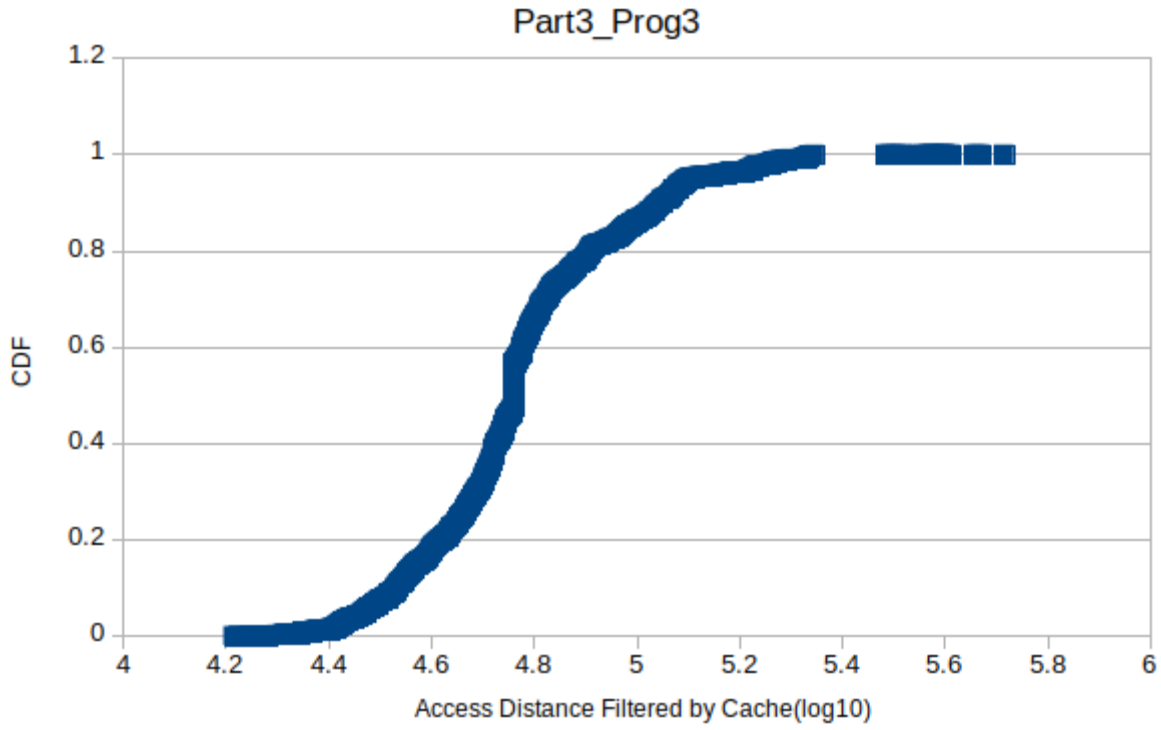

Part2_Prog3
1.02
1
0.98
0.96
0.94
0.92
0.9
CDF
0
1
2
3
4
5
6
7
8
Access Distance(log10)

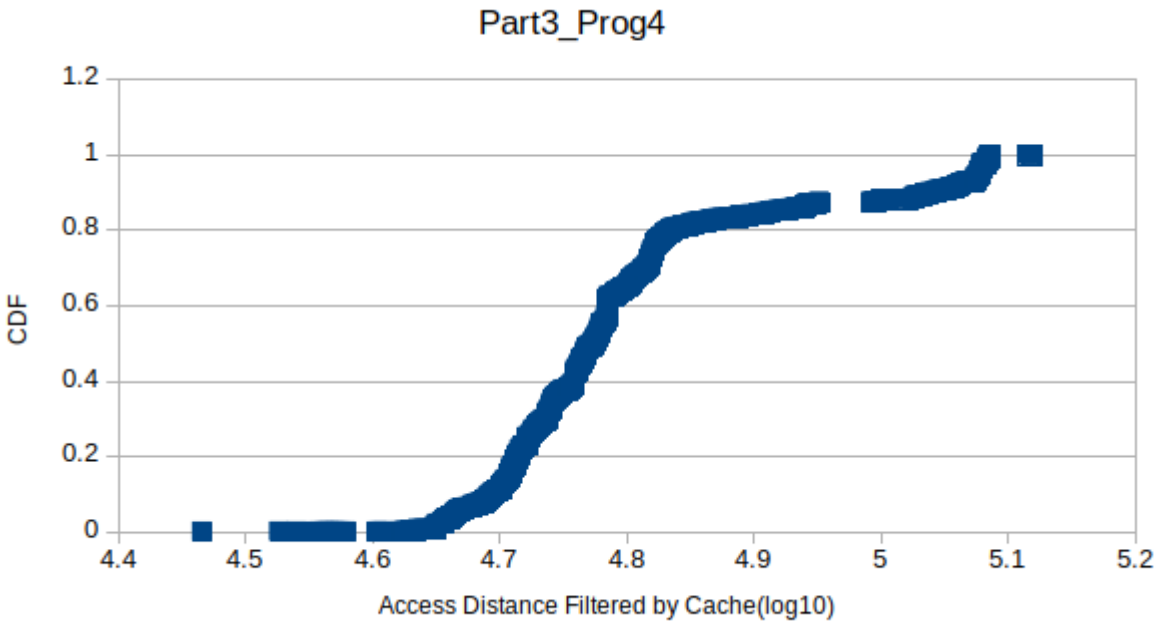

Part2_Prog4
1.02
1
0.98
0.96
0.94
0.92
0.9
0.88
CDF
0
1
2
3
4
5
6
7
Access Distance(log10)

Part 3


Part3_Prog1
1.0
0.8
0.6
0.4
0.2
0.0
CDF
10^4
10^5
10^6
Access Distance Filtered by Cache


Part3_Prog2
1.2
1
0.8
0.6
0.4
0.2
0
CDF
4.2
4.4
4.6
4.8
5
5.2
5.4
Access Distance Filtered by Cache(log10)


Part3_Prog3
1.2
1
0.8
0.6
0.4
0.2
0
CDF
4
4.2
4.4
4.6
4.8
5
5.2
5.4
5.6
5.8
6
Access Distance Filtered by Cache(log10)



Note: We are computing CDF only for those Access Distances which have atleast one count.That's why in above graphs we have some gaps.

Program	**Hit**	**Miss**
Prog1	122304872	6686630
Prog2	2325248	185429
Prog3	8941530	519594
Prog4	933287	131689

Explaination:

Shape of CDF for Access distances computed for Part2 and Part3 are not same because in Part 3 we are using Cache to filter the Trace.

And block access distance less than Cache Capacity tends to hit in the Cache(not necessarily because of conflict misses in set associative cache).

As it is seen from the graphs we are not getting CDF of access distances which are less than a certain threshold . And this threshold is approximately equals to the Cache size(32K Blocks).

Part 4

	Prog1	**Prog2**	**Prog3**	**Prog4**
Private	412	407	412	8599
2 shared	63	8255	56	57403
3 shared	1872	16384	0	6
4 shared	32456	40958	1	0
5 shared	143251	5	1	0
6 shared	244970	0	0	0
7 shared	173831	0	0	1
8 shared	124527	9	65545	10