MP7 Performance Evaluation 1 keypoints number

Detector Frame	Frame 0	Frame 1	Frame 2	Frame 3	Frame 4	Frame 5	Frame 6	Frame 7	Frame 8	Frame 9	Sum
Shi-Tomasi	1370	1301	1361	1358	1333	1284	1322	1366	1389	1339	13423
	54.0479	24.4439	25.4685	26.3591	25.8749	30.2691	30.4965	30.083	31.5473	28.1032	306.693ms
FAST	1824	1832	1810	1817	1793	1796	1788	1695	1749	1770	17874
	1.39572	1.36325	1.35009	1.31015	1.24287	3.58191	1.29274	1.31294	1.35792	1.1968	15.4044
Harris	115	98	113	121	160	383	85	210	171	281	1737
	73.823	43.8316	60.9206	59.4581	34.2492	88.6367	31.0943	61.8537	63.6003	78.5889	596.056
BRISK	2757	2777	2741	2735	2757	2695	2715	2628	2639	2672	27116
	644.97	669.104	650.602	628.952	670.312	653.287	640.596	635.593	632.427	637.69	6463.53
ORB	500	500	500	500	500	500	500	500	500	500	5000
	33.9129	25.2994	29.4264	13.7427	12.9382	27.4733	22.3025	11.5151	11.3844	24.1662	212.156
AKAZE	1351	1327	1311	1351	1360	1347	1363	1331	1357	1331	13429
	224.387	226.009	258.808	198.537	178.198	269.939	227.014	212.939	172.975	186.426	2155.23
SIFT	1438	1371	1380	1335	1305	1370	1396	1382	1463	1422	13862
	332.668	267.921	269.087	271.423	296.85	291.492	321.249	283.211	271.943	326.281	2932.12

MP.8 Total number of matched keypoints for all 10 images
rows for different descriptor, column for different detector

Descriptor\Detector	SHITOMASI	HARRIS	FAST	SIFT	BRISK	ORB	AKAZE
SIFT	910	157	993	790	1617	736	1263
BRISK	756	137	858	586	1546	728	1204
BRIEF	928 (core dumped in the end)	164	1042	693	1676	530	1257
ORB	891	157	1015	out of memory	1480	731	1175
FREAK	758	140	838	588	1494	396	1179
AKAZE	core dumped	core dumped	core dumped	core dumped	core dumped	core dumped	1249

MP.9

Descriptor\Detector	SHITOMASI	HARRIS	FAST	SIFT	BRISK	ORB	AKAZE
SIFT	759.974 ms	1047.68	685.674	3710.54	7128.1	1549.92	2407.13
BRISK	365.826 ms	438.34	55.5715	2560.5	5877.31	230.488	1874.3
BRIEF	342.31 ms	414.186	42.818	2428.11	5610.07	222.974	1885.67
ORB	450.445 ms	410.419	64.7845	Out of Memory	6290.44	320.987	2122.48
FREAK	1069.02 ms	1152.35	830.82	3692.19	6761.8	934.546	2632.62
AKAZE	core dumped	core dumped	core dumped	core dumped	core dumped	core dumped	3820.25

1st choice: FAST(detector)+BRIEF(Descriptor)
2nd choice: FAST(detector)+BRISK(Descriptor)
3rd choice: FAST(detector)+ORB(Descriptor)

Brute Force was chosen as matcher type;

HOG was chosen as descriptor type for SIFT but binary was chosen for the remaining descriptors;
K-nearest neighbor instead of NN was chosen;