Assignment-2

Precision and recall @{5,10,20}, and effectiveness for each query of **APACHE ANT**

Bug	Precision			Recall			Effectiveness		
12468	5	10	20	5	10	20	5	10	20
T	0	0.1	0.1	0	0.01	0.02	0	0	1
D	0.2	0.4	0.7	0.1	0.3	0.4	1	1	1
T+D	0.1	0.3	0.4	0.1	0.2	0.2	1	1	1
5092									
T	0.2	0.4	0.5	0.3	0.4	0.5	1	1	1
D	0.4	0.5	0.8	0.2	0.1	0.5	1	1	1
T+D	0.5	0.4	0.5	0.2	0.3	0.5	1	1	1
2522									
T	0.2	0.2	0.2	0.03	0.03	0.06	0	1	1
D	0	0	0.02	0	0	0	0	0	1
T+D	0	0.1	0.1	0	0	0.01	0	0	1
2568									
T	0	0.2	0.3	0.01	0.01	0.02	0	0	1
D	0	0.1	0.1	0.01	0.01	0.01	0	0	1
T+D	0	0.2	0.4	0.01	0.01	0.01	0	1	2
2652									
T	0	0.1	0.2	0.01	0.03	0.08	0	2	2
D	0	0	0.02	0	0	0.01	0	0	1
T+D	0	0.1	0.2	0	0.01	0.03	0	1	2

Precision and recall @{5,10,20}, and effectiveness for each query of **ASPECTJ**

Bug	Precision			Recall			Effectiveness		
48990	5	10	20	5	10	20	5	10	20
T	0.8	0.5	0.3	0.6	0.8	1	1	1	2
D	0.4	0.5	0.25	0.3	0.8	0.8	1	1	2
T+D	0.4	0.5	0.25	0.3	0.8	0.8	1	1	2
60015									
T	0.8	0.6	0.75	0.04	0.06	0.16	1	1	1
D	1	1	0.95	0.05	0.11	0.21	1	1	1
T+D	1	1	0.95	0.05	0.11	0.21	1	1	1
59895									
T	0.6	0.7	0.6	0.05	0.13	0.22	1	1	1
D	1	1	0.85	0.09	0.18	0.32	1	1	1
T+D	1	0.9	0.85	0.09	0.16	0.32	1	1	1
58520									
T	0.2	0.4	0.5	0.3	0.4	0.5	1	1	1
D	0.4	0.5	0.8	0.2	0.1	0.5	1	1	1
T+D	0.5	0.4	0.5	0.2	0.3	0.5	1	1	1
61411									
T	0	0	0.1	0	0.01	0.01	0	0	1
D	0.4	0.5	0.6	0.3	0.3	0.5	1	1	1
T+D	0.4	0.6	0.6	0.3	0.2	0.5	1	1	1

Average and median precision and recall @{5,10,20}, and effectiveness for **APACHE ANT**

	Precision			Recall			Effectiveness		
Value	5	10	20	5	10	20	5	10	20
Average	0.106667	0.206667	0.302667	0.064667	0.094	0.156667	0.333333	0.666667	1.2
Median	0	0.2	0.2	0.01	0.01	0.03	0	1	1

Average and median precision and recall @{5,10,20}, and effectiveness for **ASPECTJ**

	Precision			Recall			Effectiveness		
Value	**5**	**10**	**20**	**5**	**10**	**20**	**5**	**10**	**20**
Average	0.593333	0.606667	0.59	0.191333	0.297333	0.436667	0.933333	0.933333	1.2
Median	0.5	0.5	0.6	0.2	0.18	0.5	1	1	1

Average and median precision and recall @{5,10,20}, and effectiveness for **all the systems**

	Precision			Recall			Effectiveness		
Value	**5**	**10**	**20**	**5**	**10**	**20**	**5**	**10**	**20**
Average	0.5	0.716129	1.077097	0.285161	0.511935	0.932258	0.774194	1.096774	1.806452
Median	0.4	0.4	0.5	0.09	0.11	0.22	1	1	1

Comparison of precision, recall, and effectiveness between the three types of queries
For all systems

	Precision		Recall		Effectiveness	
	Average	**Median**	**Average**	**Median**	**Average**	**Median**
Query 1	0.41	0.55	0.27	0.076	1.1	1
Query 2	0.32	0.37	0.18	0.22	1.2	1
Query 3	0.42	0.33	0.2247	0.11	1.2	1