

Table 1: Basic information for open-source subjects collected from GitHub

ID	Subjects	SLOC	TLOC	#Test Cases	#Mutants
S_1	DiskLruCache	780	1,030	61	152
S_2	gson-fire	895	726	36	520
S_3	gson-fire-v2	1,178	952	47	202
S_4	jumbl	1,489	1,243	103	167
S_5	java-apns	1,503	1,724	87	412
S_6	jasmine-maven-plugin	1,671	1,931	102	561
S_7	java-uuid-generator	1,790	2,388	45	346
S_8	gdx-artemis-master	1,851	1,492	35	961
S_9	jopt-simple	1,924	5,903	727	1,677
S_{10}	protoparser	2,153	3,227	171	864
S_{11}	jackson-datatype-guava	2,217	1,035	73	845
S_{12}	jackson-datatype-guava-v2	2,366	1,327	80	320
S_{13}	JActor	2,542	4,418	65	56
S_{14}	spring-retry	2,765	3,419	185	351
S_{15}	scribe-java	2,808	2,536	99	563
S_{16}	metrics-core	2,835	2,194	150	1,656
S_{17}	javapoet	2,986	4,399	332	973
S_{18}	low-gc-memuffers	3,184	9,782	51	780
S_{19}	lambdaj-master	3,634	4,914	265	3,399
S_{20}	LastCalc-0.1	4,522	581	32	2,499
S_{21}	stream-lib	4,835	3,806	141	3,811
S_{22}	webbit	4,914	8,463	131	349
S_{23}	commons-pool	5,206	8,232	272	633
S_{24}	redline-smalltalk-master	5,648	480	43	3,450
S_{25}	la4j	7,086	4,050	625	5,023
S_{26}	redline-smalltalk	7,212	2,414	240	833
S_{27}	nv-websocket-client	7,351	657	73	277
S_{28}	joss	8,078	6,035	531	1,289
S_{29}	raml-java-parser-master	8,696	3,005	192	4,506
S_{30}	raml-java-parser	8,788	5,061	197	1,288
S_{31}	la4j-v2	9,272	4,035	799	3,141
S_{32}	commons-io	9,980	19,189	1,081	7,773
S_{33}	streamex	10,427	7,906	450	3,958
S_{34}	jsoup	10,507	12,037	666	3,157
S_{35}	commons-dbcp	11,592	8,752	560	2,601
S_{36}	rome-1.5.0	11,647	2,705	475	4,929
S_{37}	assertj-core	13,361	53,059	2,470	4,571
S_{38}	vraptor-archive	16,910	16,213	1,130	7,245
S_{39}	mapdb-mapdb-1.0.9	17,589	35,873	1,776	876
S_{40}	RoaringBitmap	17,807	21,494	1,148	21,319
S_{41}	blueflood	19,517	15,774	961	1,854
S_{42}	lanterna	20,682	7,724	34	344
S_{43}	jackson-core	21,320	10,924	376	6,215
S_{44}	jsprit	23,073	18,373	1,250	12,350
S_{45}	hivemall	28,569	3,975	150	6,557
S_{46}	asterisk-java	30,495	4,263	217	3,226
S_{47}	asterisk-java-v2	31,074	4,258	217	921
S_{48}	restcountries	31,324	468	40	113
S_{49}	chukwa	32,654	8,051	131	569
S_{50}	ews-java-api	45,313	1,328	90	1,782
S_{51}	languagetool	47,589	20,778	719	26,662
S_{52}	OpenTripPlanner-otp-0.20.0	64,718	14,207	379	7,325
S_{53}	hbase-1.2.2	66,630	17,385	434	1,781
S_{54}	commons-math	86,748	90,798	5,082	84,476
S_{55}	camel-core	120,248	134,036	5,623	13,005
Total		912,045	633,085	31,454	262,295