

Table I: Results of the comparison of the combination of szz tools with the detection of szz tools separately

projects name	Combination of tools	Pydriller detection	Openszz detection
ant-ivy	83.33%	100.00%	83.33%
archiva	29.23%	96.92%	29.23%
calcite	86.11%	99.69%	86.11%
cayenne	50.85%	98.31%	50.85%
commons-bcel	40.00%	100.00%	40.00%
commons-beanutils	81.82%	100.00%	81.82%
commons-codec	50.00%	100.00%	50.00%
commons-collections	38.46%	100.00%	38.46%
commons-compress	53.06%	100.00%	53.06%
commons-configuration	56.36%	100.00%	56.36%
commons-dbcp	40.63%	100.00%	40.63%
commons-digester	8.33%	100.00%	8.33%
commons-io	60.87%	100.00%	60.87%
commons-jcs	54.17%	100.00%	54.17%
commons-jexl	16.67%	100.00%	16.67%
commons-lang	56.06%	84.85%	56.06%
commons-math	27.12%	100.00%	27.12%
commons-net	55.77%	100.00%	55.77%
commons-scxml	52.94%	100.00%	52.94%
commons-validator	42.86%	100.00%	42.86%
commons-vfs	35.71%	98.21%	35.71%
deltaspikes	66.67%	100.00%	66.67%
eagle	35.00%	100.00%	35.00%
giraph	29.73%	100.00%	29.73%
gora	59.09%	100.00%	59.09%
jspwiki	11.54%	100.00%	11.54%
knox	51.77%	97.87%	51.77%
kylin	0.00%	99.43%	0.00%
lens	92.31%	100.00%	92.31%
mahout	50.00%	99.55%	50.00%
manifoldcf	83.69%	100.00%	83.69%
nutch	79.31%	94.83%	82.76%
opennlp	42.86%	100.00%	42.86%
parquet-mr	21.69%	100.00%	21.69%
santuario-java	51.35%	100.00%	51.35%
systemds	0.00%	100.00%	0.00%
tika	62.20%	97.64%	62.20%
ws-wss4j	31.58%	100.00%	31.58%