entry LINENUMBER 33 L0 INVOKESTATIC java/lang/System.nanoTime ()J LSTORE 1 L1 LINENUMBER 34 L1 GETSTATIC java/lang/System.out : Ljava/io/PrintStream; LDC "Instrumented" INVOKEVIRTUAL java/io/PrintStream.println (Ljava/lang/String;)V LINENUMBER 35 L2 INVOKESTATIC edu/cmu/cs/mvelezce/analysis/option/Sink.init ()V LINENUMBER 37 L3 LDC "prime" ASTORE 3 LINENUMBER 38 L4 NEW java/io/File DUP ALOAD 3 INVOKESPECIAL java/io/File.<init> (Ljava/lang/String;)V ASTORE 4 L5 LINENUMBER 40 L5 ALOAD 4 INVOKEVIRTUAL java/io/File.exists ()Z LDC "org/prevayler/demos/demo1/PrimeNumbers.main([Ljava/lang/String;)V" INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.enterDecision (Ljava/lang/String;I)V INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.logIFEQEval (I)V IFEQ L6 LINENUMBER 41 L7 ALOAD 4 INVOKESTATIC org/apache/commons/io/FileUtils.forceDelete (Ljava/io/File;)V FRAME APPEND [J java/lang/String java/io/File] LDC "org/prevayler/demos/demo1/PrimeNumbers.main([Ljava/lang/String;)V" INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.exitDecision (Ljava/lang/String;I)V LINENUMBER 44 L8 ALOAD 0 ICONST 0 AALOAD INVOKESTATIC java/lang/Boolean.valueOf (Ljava/lang/String;)Ljava/lang/Boolean; INVOKEVIRTUAL java/lang/Boolean.booleanValue ()Z INVOKESTATIC edu/cmu/cs/mvelezce/analysis/option/Source.getOptionTRANSIENTMODE (Z)Z PUTSTATIC org/prevayler/demos/demo1/PrimeNumbers.TRANSIENTMODE: Z LINENUMBER 45 L9 ALOAD 0 ICONST_1 AALOAD INVOKESTATIC java/lang/Boolean.valueOf (Ljava/lang/String;)Ljava/lang/Boolean; INVOKEVIRTUAL java/lang/Boolean.booleanValue ()Z INVOKESTATIC edu/cmu/cs/mvelezce/analysis/option/Source.getOptionCLOCK (Z)Z PUTSTATIC org/prevayler/demos/demo1/PrimeNumbers.CLOCK: Z LINENUMBER 46 L10 ALOAD 0 ICONST_2 AALOAD INVOKESTATIC java/lang/Boolean.valueOf (Ljava/lang/String;)Ljava/lang/Boolean; INVOKEVIRTUAL java/lang/Boolean.booleanValue ()Z INVOKESTATIC edu/cmu/cs/mvelezce/analysis/option/Source.getOptionDEEPCOPY (Z)Z PUTSTATIC org/prevayler/demos/demo1/PrimeNumbers.DEEPCOPY: Z LINENUMBER 47 L11 ALOAD 0 ICONST_3 AALOAD INVOKESTATIC java/lang/Boolean.valueOf (Ljava/lang/String;)Ljava/lang/Boolean; INVOKEVIRTUAL java/lang/Boolean.booleanValue ()Z INVOKESTATIC edu/cmu/cs/mvelezce/analysis/option/Source.getOptionDISKSYNC (Z)Z PUTSTATIC org/prevayler/demos/demo1/PrimeNumbers.DISKSYNC: Z LINENUMBER 64 L12 GETSTATIC org/prevayler/demos/demo1/PrimeNumbers.TRANSIENTMODE: Z ISTORE 5 L13 LINENUMBER 66 L13 GETSTATIC org/prevayler/demos/demo1/PrimeNumbers.DEEPCOPY: Z ISTORE 7 L14 LINENUMBER 67 L14 GETSTATIC org/prevayler/demos/demo1/PrimeNumbers.DISKSYNC : Z ISTORE 8 L15 LINENUMBER 68 L15 ICONST 0 ISTORE 9 L16 LINENUMBER 69 L16 ICONST_0 ISTORE 10 L17 LINENUMBER 72 L17 GETSTATIC org/prevayler/demos/demo1/PrimeNumbers.CLOCK : Z LDC "org/prevayler/demos/demo1/PrimeNumbers.main([Ljava/lang/String;)V" BIPUSH 1 INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.enterDecision (Ljava/lang/String;I)V INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.logIFEQEval (I)V IFEQ L18 LINENUMBER 73 L19 NEW org/prevayler/implementation/clock/PausableClock LINENUMBER 75 L18 FRAME FULL [[Ljava/lang/String; J java/lang/String java/io/File I T I I I I] [] NEW org/prevayler/implementation/clock/MachineClock NEW org/prevayler/implementation/clock/MachineClock INVOKESPECIAL org/prevayler/implementation/clock/MachineClock.<init> ()V INVOKESPECIAL org/prevayler/implementation/clock/PausableClock.<init> (Lorg/prevayler/Clock;)V INVOKESPECIAL org/prevayler/implementation/clock/MachineClock.<init>()V ASTORE 6 ASTORE 6 L20 GOTO L21 FRAME FULL [[Ljava/lang/String; J java/lang/String java/io/File I java/lang/Object I I I I] [] LDC "org/prevayler/demos/demo1/PrimeNumbers.main([Ljava/lang/String;)V" BIPUSH 1 INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.exitDecision (Ljava/lang/String;I)V LINENUMBER 78 L22 GETSTATIC org/prevayler/demos/demo1/PrimeNumbers.FILESIZETHRESHOLD : Z LDC "org/prevayler/demos/demo1/PrimeNumbers.main([Ljava/lang/String;)V" INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.enterDecision (Ljava/lang/String;I)V INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.logIFEQEval (I)V IFEQ L23 L24 LINENUMBER 79 L24 LDC 1000000 ISTORE 9 FRAME SAME LDC "org/prevayler/demos/demo1/PrimeNumbers.main([Ljava/lang/String;)V" INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.exitDecision (Ljava/lang/String;I)V LINENUMBER 82 L25 GETSTATIC org/prevayler/demos/demo1/PrimeNumbers.FILEAGETHRESHOLD : Z LDC "org/prevayler/demos/demo1/PrimeNumbers.main([Ljava/lang/String;)V" BIPUSH 3 INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.enterDecision (Ljava/lang/String;I)V INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.logIFEQEval (I)V IFEQ L26 L27 LINENUMBER 83 L27 LDC 1000000 ISTORE 10 L26 FRAME SAME LDC "org/prevayler/demos/demo1/PrimeNumbers.main([Ljava/lang/String;)V" INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.exitDecision (Ljava/lang/String;I)V L28 LINENUMBER 86 L28 GETSTATIC org/prevayler/demos/demo1/PrimeNumbers.MONITOR: Z LDC "org/prevayler/demos/demo1/PrimeNumbers.main([Ljava/lang/String;)V" INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.enterDecision (Ljava/lang/String;I)V INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.logIFEQEval (I)V IFEQ L29 L30 L29 LINENUMBER 87 L30 LINENUMBER 89 L29 NEW org/prevayler/foundation/monitor/Log4iMonitor FRAME SAME NEW org/prevayler/foundation/monitor/SimpleMonitor INVOKESPECIAL org/prevayler/foundation/monitor/Log4jMonitor.<init>()V ASTORE 11 INVOKESPECIAL org/prevayler/foundation/monitor/SimpleMonitor.<init>()V L31 ASTORE 11 GOTO L32 FRAME APPEND [org/prevayler/foundation/monitor/LoggingMonitor] LDC "org/prevayler/demos/demo1/PrimeNumbers.main([Ljava/lang/String;)V" INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.exitDecision (Ljava/lang/String;I)V LINENUMBER 92 L33 NEW org/prevayler/PrevaylerFactory INVOKESPECIAL org/prevayler/PrevaylerFactory.<init> ()V ASTORE 12 L34 LINENUMBER 93 L34 ALOAD 12 NEW org/prevayler/demos/demo1/NumberKeeper INVOKESPECIAL org/prevayler/demos/demo1/NumberKeeper.<init>()V INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configurePrevalentSystem (Ljava/lang/Object;)V LINENUMBER 94 L35 ALOAD 12 ALOAD 3 INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configurePrevalenceDirectory (Ljava/lang/String;)V LINENUMBER 96 L36 ALOAD 12 ALOAD 6 INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureClock (Lorg/prevayler/Clock;)V LINENUMBER 97 L37 ALOAD 12 ALOAD 11 INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureMonitor (Lorg/prevayler/foundation/monitor/Monitor;)V LINENUMBER 98 L38 ALOAD 12 ILOAD 5 INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureTransientMode (Z)V LINENUMBER 99 L39 ALOAD 12 ILOAD 7 INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureTransactionDeepCopy (Z)V LINENUMBER 100 L40 ALOAD 12 ILOAD 8 INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureJournalDiskSync (Z)V LINENUMBER 101 L41 ALOAD 12 ILOAD 9 INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureJournalFileSizeThreshold (J)V LINENUMBER 102 L42 ALOAD 12 ILOAD 10 INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureJournalFileAgeThreshold (J)V LINENUMBER 104 L43 GETSTATIC org/prevayler/demos/demo1/PrimeNumbers.JOURNALSERIALIZER : Z LDC "org/prevayler/demos/demo1/PrimeNumbers.main([Ljava/lang/String;)V" INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.enterDecision (Ljava/lang/String;I)V INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.logIFEQEval (I)V IFEQ L44 L45 LINENUMBER 105 L45 LINENUMBER 107 L44 ALOAD 12 FRAME APPEND [org/prevayler/PrevaylerFactory] ALOAD 12 NEW org/prevayler/foundation/serialization/XStreamSerializer NEW org/prevayler/foundation/serialization/JavaSerializer INVOKESPECIAL org/prevayler/foundation/serialization/XStreamSerializer.<init> ()V **DUP** INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureJournalSerializer (Lorg/prevayler/foundation/serialization/XStreamSerializer;)V INVOKESPECIAL org/prevayler/foundation/serialization/JavaSerializer.<init> ()V INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureJournalSerializer (Lorg/prevayler/foundation/serialization/JavaSerializer;)V GOTO L46 L46 FRAME SAME LDC "org/prevayler/demos/demo1/PrimeNumbers.main([Ljava/lang/String;)V" INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.exitDecision (Ljava/lang/String;I)V LINENUMBER 110 L47 GETSTATIC org/prevayler/demos/demo1/PrimeNumbers.SNAPSHOTSERIALIZER: Z LDC "org/prevayler/demos/demo1/PrimeNumbers.main([Ljava/lang/String;)V" INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.enterDecision (Ljava/lang/String;I)V INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.logIFEQEval (I)V IFEQ L48 L49 LINENUMBER 113 L48 LINENUMBER 111 L49 FRAME SAME ALOAD 12 NEW org/prevayler/foundation/serialization/XStreamSerializer ALOAD 12 NEW org/prevayler/foundation/serialization/JavaSerializer INVOKESPECIAL org/prevayler/foundation/serialization/XStreamSerializer.<init>()V INVOKESPECIAL org/prevayler/foundation/serialization/JavaSerializer.<init> ()V INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureSnapshotSerializer (Lorg/prevayler/foundation/serialization/XStreamSerializer;)V INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureSnapshotSerializer (Lorg/prevayler/foundation/serialization/JavaSerializer;)V GOTO L50 L50 FRAME SAME LDC "org/prevayler/demos/demo1/PrimeNumbers.main([Ljava/lang/String;)V" INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.exitDecision (Ljava/lang/String;I)V LINENUMBER 116 L51 ALOAD 12 INVOKEVIRTUAL org/prevayler/PrevaylerFactory.create ()Lorg/prevayler/Prevayler; ASTORE 13 L52 LINENUMBER 117 L52 NEW org/prevayler/demos/demo1/PrimeCalculator DUP ALOAD 13 INVOKESPECIAL org/prevayler/demos/demo1/PrimeCalculator.<init> (Lorg/prevayler/Prevayler;)V INVOKEVIRTUAL org/prevayler/demos/demo1/PrimeCalculator.start ()V LINENUMBER 120 L53 NEW org/prevayler/PrevaylerFactory INVOKESPECIAL org/prevayler/PrevaylerFactory.<init>()V ASTORE 12 L54 LINENUMBER 121 L54 ALOAD 12 NEW org/prevayler/demos/demo1/NumberKeeper INVOKESPECIAL org/prevayler/demos/demo1/NumberKeeper.<init>()V INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configurePrevalentSystem (Ljava/lang/Object;)V LINENUMBER 122 L55 ALOAD 12 ALOAD 3 INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configurePrevalenceDirectory (Ljava/lang/String;)V L56 LINENUMBER 124 L56 ALOAD 12 ALOAD 6 INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureClock (Lorg/prevayler/Clock;)V LINENUMBER 125 L57 ALOAD 12 ALOAD 11 INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureMonitor (Lorg/prevayler/foundation/monitor/Monitor;)V LINENUMBER 126 L58 ALOAD 12 ILOAD 5 INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureTransientMode (Z)V LINENUMBER 127 L59 ALOAD 12 ILOAD 7 INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureTransactionDeepCopy (Z)V LINENUMBER 128 L60 ALOAD 12 ILOAD 8 INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureJournalDiskSync (Z)V LINENUMBER 129 L61 ALOAD 12 ILOAD 9 INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureJournalFileSizeThreshold (J)V LINENUMBER 130 L62 ALOAD 12 ILOAD 10 INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureJournalFileAgeThreshold (J)V LINENUMBER 132 L63 GETSTATIC org/prevayler/demos/demo1/PrimeNumbers.JOURNALSERIALIZER : Z LDC "org/prevayler/demos/demo1/PrimeNumbers.main([Ljava/lang/String;)V" BIPUSH 7 INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.enterDecision (Ljava/lang/String;I)V INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.logIFEQEval (I)V IFEQ L64 LINENUMBER 133 L65 LINENUMBER 135 L64 FRAME APPEND [org/prevayler/Prevayler] ALOAD 12 ALOAD 12 NEW org/prevayler/foundation/serialization/XStreamSerializer NEW org/prevayler/foundation/serialization/JavaSerializer INVOKESPECIAL org/prevayler/foundation/serialization/XStreamSerializer.<init>()V INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureJournalSerializer (Lorg/prevayler/foundation/serialization/XStreamSerializer;)V INVOKESPECIAL org/prevayler/foundation/serialization/JavaSerializer.<init>()V INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureJournalSerializer (Lorg/prevayler/foundation/serialization/JavaSerializer;)V GOTO L66 L66 FRAME SAME LDC "org/prevayler/demos/demo1/PrimeNumbers.main([Ljava/lang/String;)V" INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.exitDecision (Ljava/lang/String;I)V LINENUMBER 138 L67 GETSTATIC org/prevayler/demos/demo1/PrimeNumbers.SNAPSHOTSERIALIZER: Z LDC "org/prevayler/demos/demo1/PrimeNumbers.main([Ljava/lang/String;)V" INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.enterDecision (Ljava/lang/String;I)V INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.logIFEQEval (I)V IFEQ L68 L69 L68 LINENUMBER 139 L69 LINENUMBER 141 L68 FRAME SAME ALOAD 12 NEW org/prevayler/foundation/serialization/XStreamSerializer ALOAD 12 NEW org/prevayler/foundation/serialization/JavaSerializer INVOKESPECIAL org/prevayler/foundation/serialization/XStreamSerializer.<init>()V INVOKESPECIAL org/prevayler/foundation/serialization/JavaSerializer.<init> ()V INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureSnapshotSerializer (Lorg/prevayler/foundation/serialization/JavaSerializer;)V INVOKEVIRTUAL org/prevayler/PrevaylerFactory.configureSnapshotSerializer (Lorg/prevayler/foundation/serialization/XStreamSerializer;)V GOTO L70 L70 FRAME SAME LDC "org/prevayler/demos/demo1/PrimeNumbers.main([Ljava/lang/String;)V" BIPUSH 8 INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.exitDecision (Ljava/lang/String;I)V LINENUMBER 145 L71 ALOAD 12 INVOKEVIRTUAL org/prevayler/PrevaylerFactory.create ()Lorg/prevayler/Prevayler; ASTORE 13 L72 LINENUMBER 146 L72 NEW org/prevayler/demos/demo1/PrimeCalculator DUP ALOAD 13 INVOKESPECIAL org/prevayler/demos/demo1/PrimeCalculator.<init> (Lorg/prevayler/Prevayler;)V INVOKEVIRTUAL org/prevayler/demos/demo1/PrimeCalculator.start1 ()V LINENUMBER 149 L73 INVOKESTATIC java/lang/System.nanoTime ()J LSTORE 14 L74 LINENUMBER 151 L74 GETSTATIC java/lang/System.out : Ljava/io/PrintStream; LLOAD 14 LLOAD 1 LSUB L2D LDC 1.0E9 **DDIV** INVOKEVIRTUAL java/io/PrintStream.println (D)V LINENUMBER 152 L75 INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/taint/java/groundtruth/SubtracesLogger.saveTrace ()V RETURN L76

exit