LOG4J

🡪Log4j is an framework it is used to write the logs in an console ,file ,database ,(or) we can send it through mail also.

🡪In realtime it is not at all good printing the output on console by using system.out.println() such that log4j had came into picture by using log4j we can able to write output in any one of them like console,file ,database,(or)through mail.

🡪For running log4j framework we need an java file and properties file

🡪we need an log4j jar for implementing the framework.we can download the jar very easily form the apache tomcat official wesite

**Steps for creating log4j for simple java program for having logs in console**

Step 1: Create an java file

Step 2: create an static logger object

Example:

static Logger *l*=Logger.*getLogger*("Log4jExampleInJavaProgramming");

step 3:After creating an logger object we write the following statements

1. debug
2. info
3. warn
4. fatal

example:

*logger*.debug("this is the info by log4j");

*logger*.info("this is info message");

*logger*.warn("this is warn message");

logger.fatal(“this is fatal message”);

**example java program:**

Log4jExampleInJavaProgramming.java

**import** org.apache.log4j.Logger;

**public** **class** Log4jExampleInJavaProgramming {

**static** Logger *logger*=Logger.*getLogger*("Log4jExampleInJavaProgramming");

(or)

*logger*=Logger.*getLogger*(Log4jExampleInJavaProgramming.class);

**public** **static** **void** main(String[] args)

{

*logger*.debug("this is the info by log4j");

*logger*.info("this is info message");

*logger*.warn("this is warn message");

logger.fatal(“this is fatal message”);

}

}

Step 4:create the properties file with the name log4j.properties.

log4j.properties

log4j.rootLogger=DEBUG,CA

log4j.appender.CA=org.apache.log4j.ConsoleAppender

log4j.appender.CA.layout=org.apache.log4j.PatternLayout

log4j.appender.CA.layout.ConversionPattern=%t %d{yyyy-MM-dd } %-5p %c %L %m %n

output:

main 2017-01-26 DEBUG Log4jExampleInJavaProgramming 15 this is the info by log4j

main 2017-01-26 INFO Log4jExampleInJavaProgramming 16 this is info message

main 2017-01-26 WARN Log4jExampleInJavaProgramming 17 this is warn message

main 2017-01-26 FATAL Log4jExampleInJavaProgramming 18 this is fatal message

Note:

1.while importing the logger jar file just have an look carefully

2.properties file name should be log4j.properties

3.CA means console appender

**Steps for creating log4j for simple java program for having logs in file**

Step 1: Create an java file

Step 2: create an static logger object

Example:

static Logger *l*=Logger.*getLogger*("Log4jExampleInJavaProgramming");

step 3:After creating an logger object we write the following statements

1. debug
2. info
3. warn
4. fatal

example:

*logger*.debug("this is the info by log4j");

*logger*.info("this is info message");

*logger*.warn("this is warn message");

logger.fatal(“this is fatal message”);

**example java program:**

Log4jExampleInJavaProgramming.java

**import** org.apache.log4j.Logger;

**public** **class** Log4jExampleInJavaProgramming {

**static** Logger *logger*=Logger.*getLogger*("Log4jExampleInJavaProgramming");

(or)

*logger*=Logger.*getLogger*(Log4jExampleInJavaProgramming.class);

**public** **static** **void** main(String[] args)

{

*logger*.debug("this is the info by log4j");

*logger*.info("this is info message");

*logger*.warn("this is warn message");

logger.fatal(“this is fatal message”);

}

}

Step 4:create the properties file with the name log4j.properties.

log4j.properties

log4j.rootLogger=DEBUG,FA

log4j.appender.FA=org.apache.log4j.FileAppender

log4j.appender.FA.File=D:\log.txt

log4j.appender.FA.layout=org.apache.log4j.PatternLayout

log4j.appender.FA.layout.ConversionPattern=%t %d{yyyy-MM-dd } %-5p %c %L %m %n

output:

main 2017-01-26 DEBUG Log4jExampleInJavaProgramming 15 this is the info by log4j

main 2017-01-26 INFO Log4jExampleInJavaProgramming 16 this is info message

main 2017-01-26 WARN Log4jExampleInJavaProgramming 17 this is warn message

main 2017-01-26 FATAL Log4jExampleInJavaProgramming 18 this is fatal message

Note:

1.while importing the logger jar file just have an look carefully

2.properties file name should be log4j.properties

3.FA means File Appender

log4j.appender.FA.layout.ConversionPattern=%t %d{yyyy-MM-dd } %-5p %c %L %m %n

%t---it will get the thread name which it is using

%d----it will display the date

%p----display priority levels

%c----it will displays the class name

%l----it displays the line number

%m----it gets the message in the priorities

%n---- it moves the cursor to the next line