**NAME**

JSCompiler – Constructor for instantiating JSCompiler class

**SYNOPSIS**

JSCompiler.JSCompiler ();

JSCompiler.JSCompiler (String inputFile, String outputFile);

**DESCRIPTION**

JSCompiler class is instantiated and set to be prepared by the path of input and output file. By default, input file is set to “input.js” and output file is set to “output.ll”.

**RETURN VALUES**

Upon successful completion, JSCompiler returns an object of JSCompiler class. Otherwise, JVM reports an error for the failure.

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**NAME**

set – configure the execution environment

**SYNOPSIS**

void JSCompiler.setInputFile (String inputFile);

void JSCompiler.setOutputFile (String outputFile);

**DESCRIPTION**

Set the paths of input and output file respectively.

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**NAME**

run – compile the input Javascript source code ot LLVM IR

**SYNOPSIS**

void JSCompiler.run ()

**DESCRIPTION**

Compile the input source code to LLVM IR using ANTLR4 and LLVMLite. At first, parse the input source code with ANTLR4 and generate AST. And the type inference module will infer the type of each variables and functions. At last, generate LLVM IR with LLVMLite solution.

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