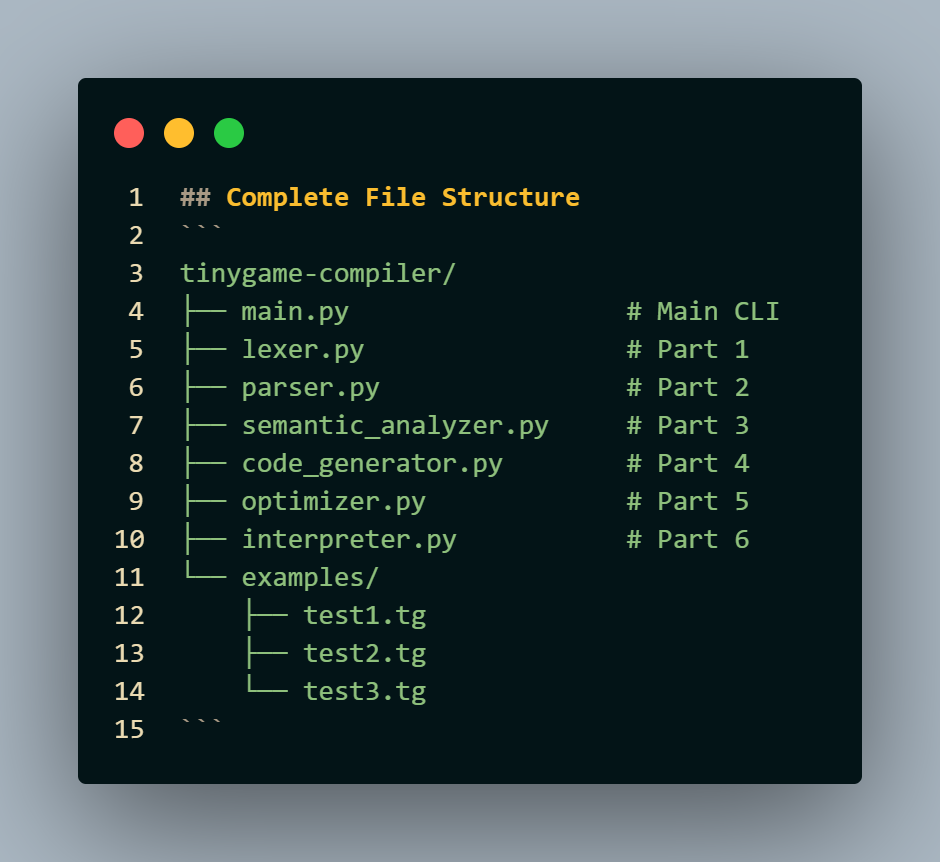
**Compiler Construction Project Part-3 (Implementation)**

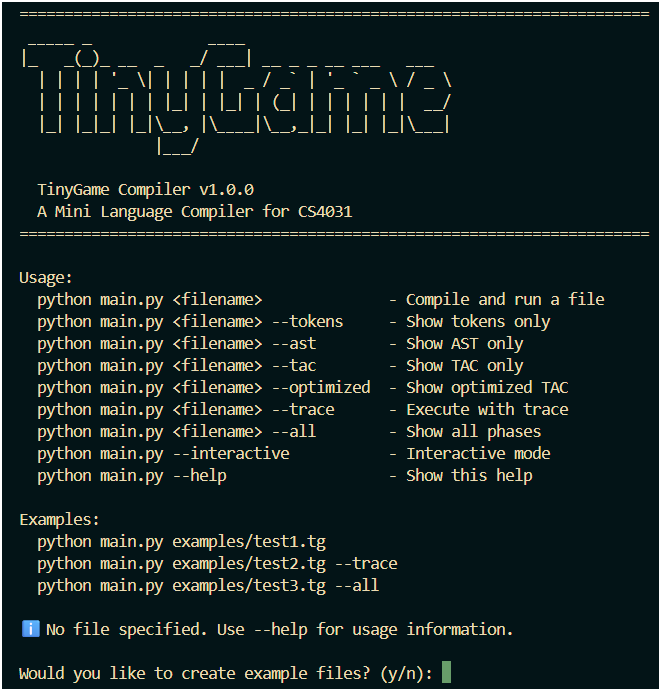
# GitHub Repository:

<https://github.com/Anasahmed-10/Compiler-Construction-Project.git>

# Code Structure



# UI



# 

# Stage 1 - Lexical Analysis

## Token DataClass

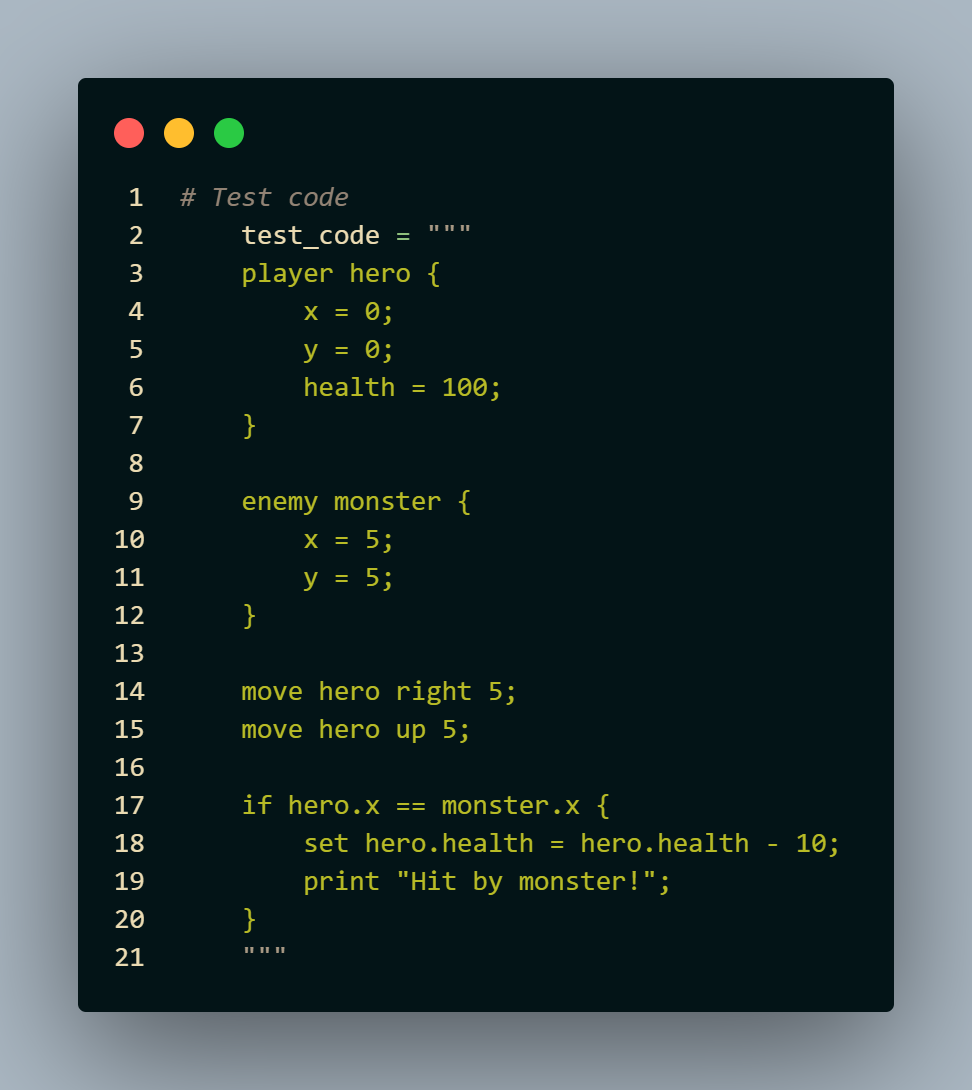


## Functions

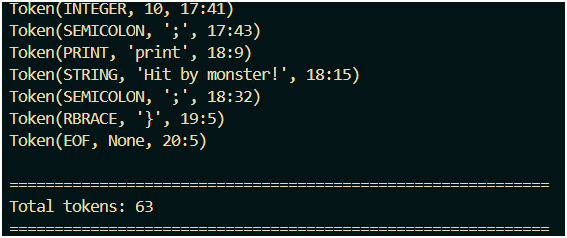




## Input

****

## Output

****

# Stage 2 - Syntax Analysis

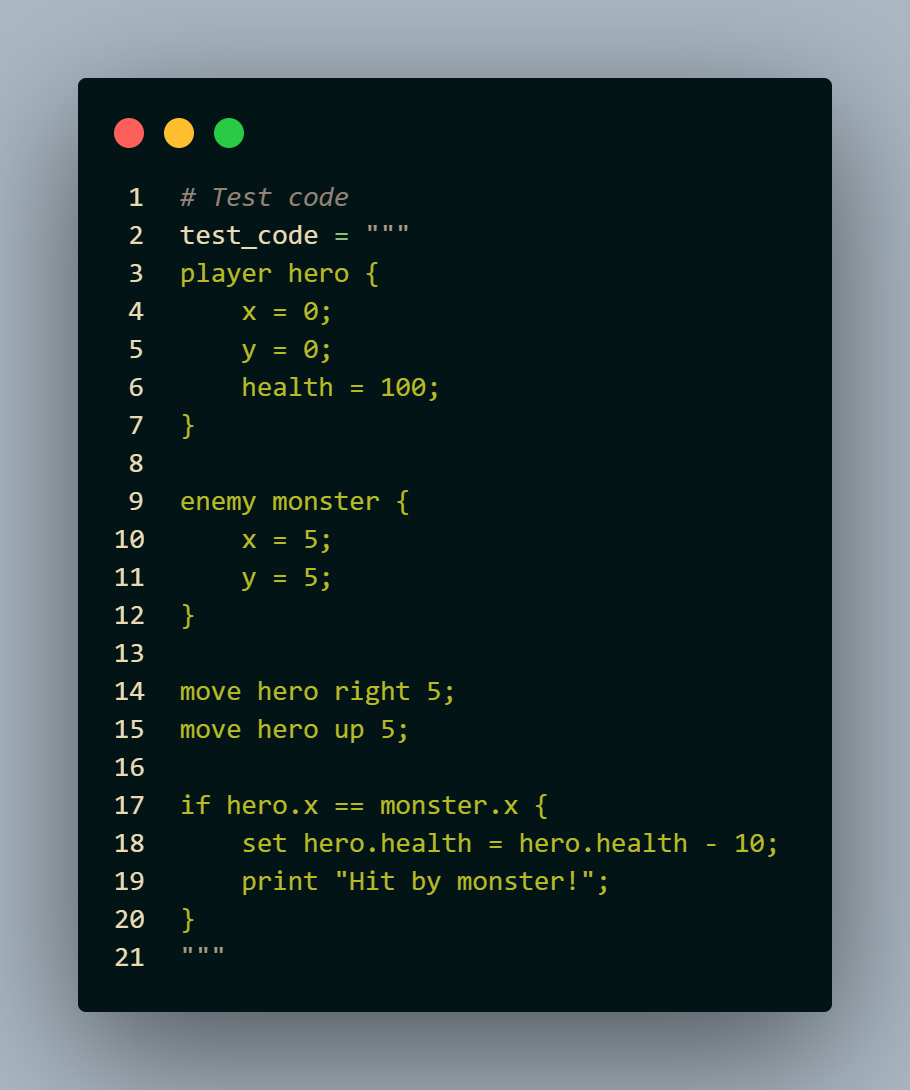
## ASTNode DataClass



## Functions



## Input



## Output



# Stage 3 - Semantic Analysis

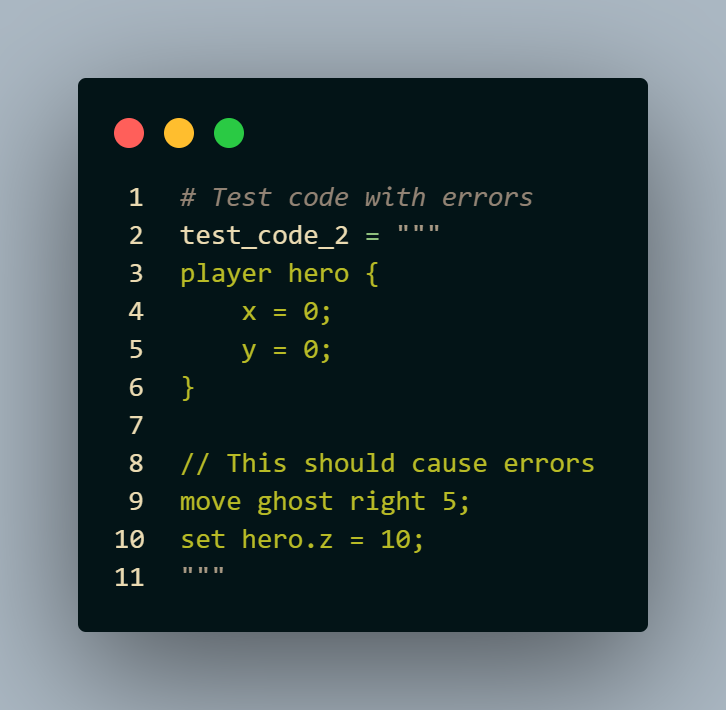
## Symbol DataClass



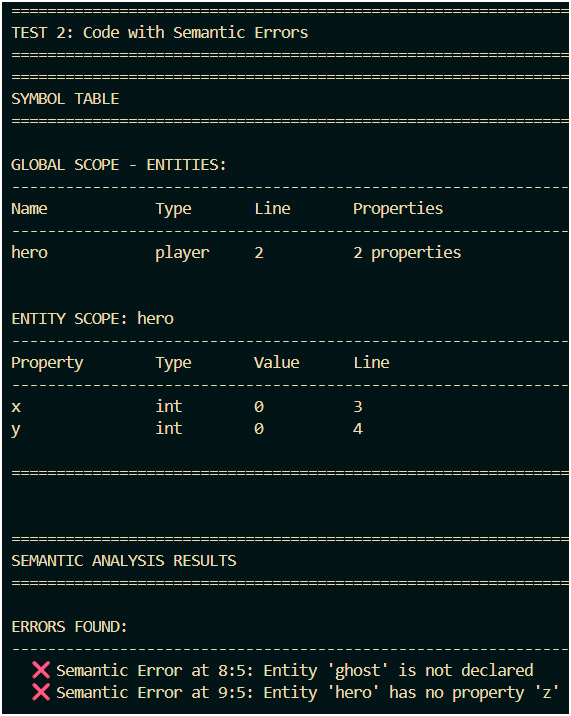
## Functions



## Input

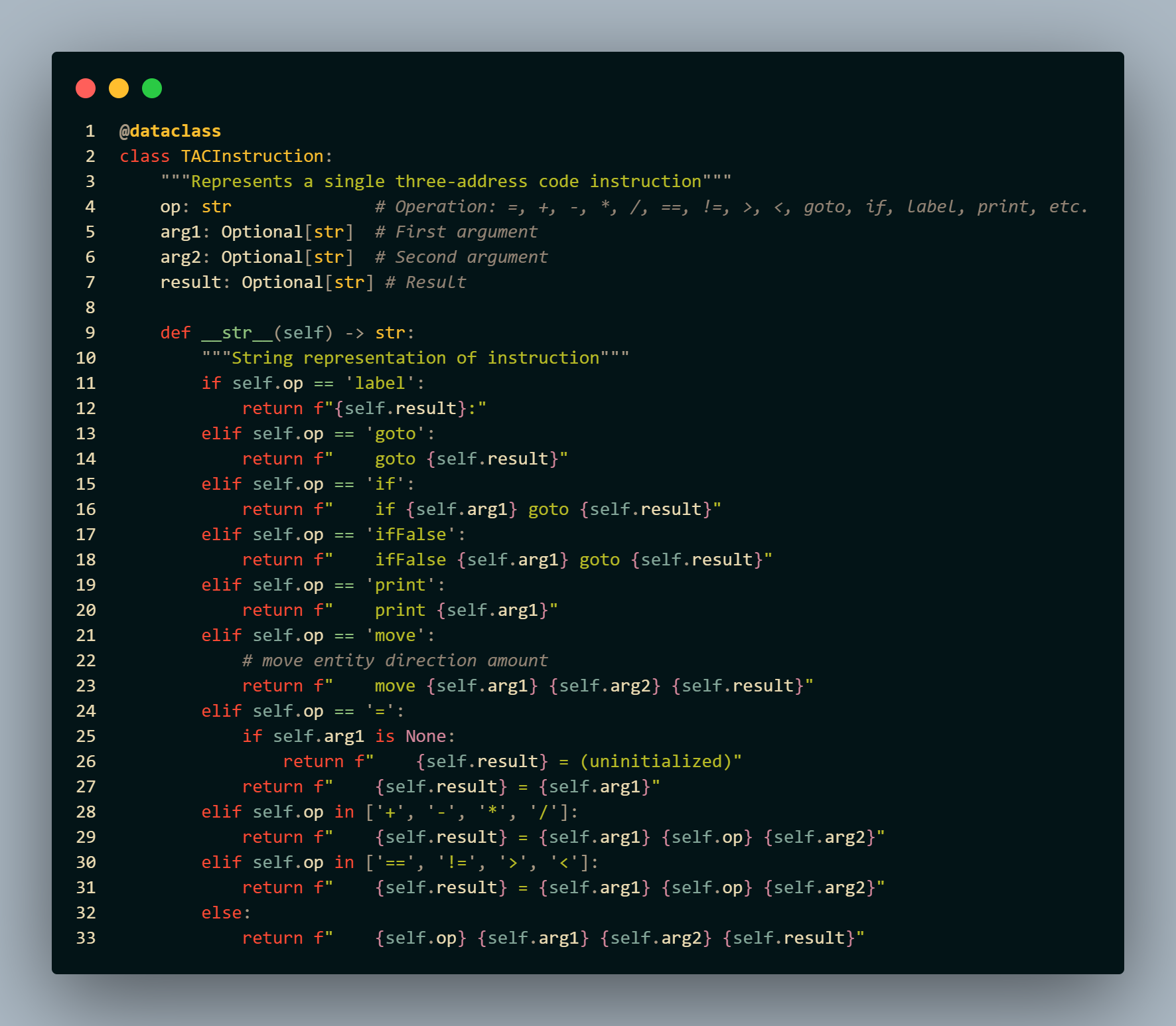


## Output



# Stage 4 - Intermediate Code Generation

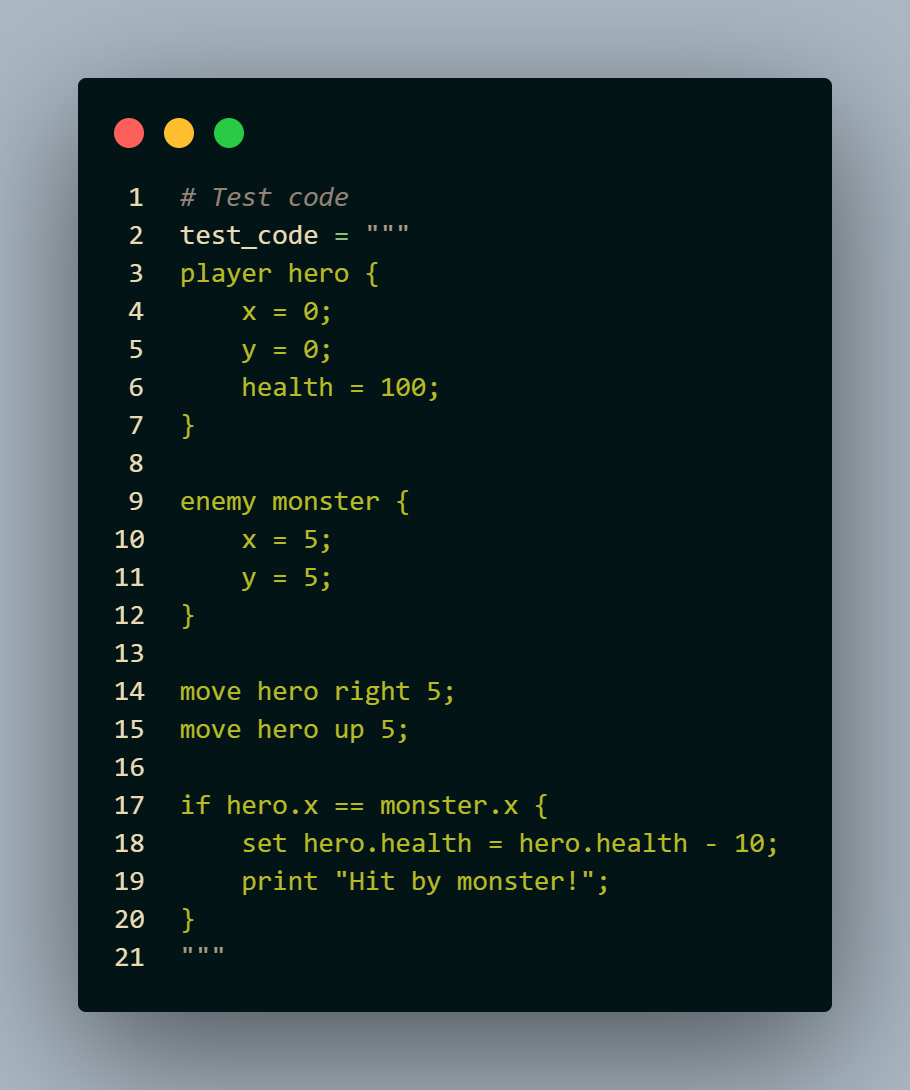
## TAC Instruction DataClass



## Functions

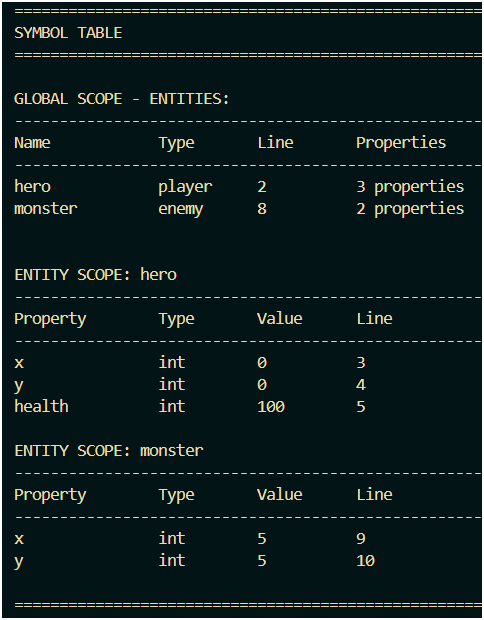


## Input



## Output



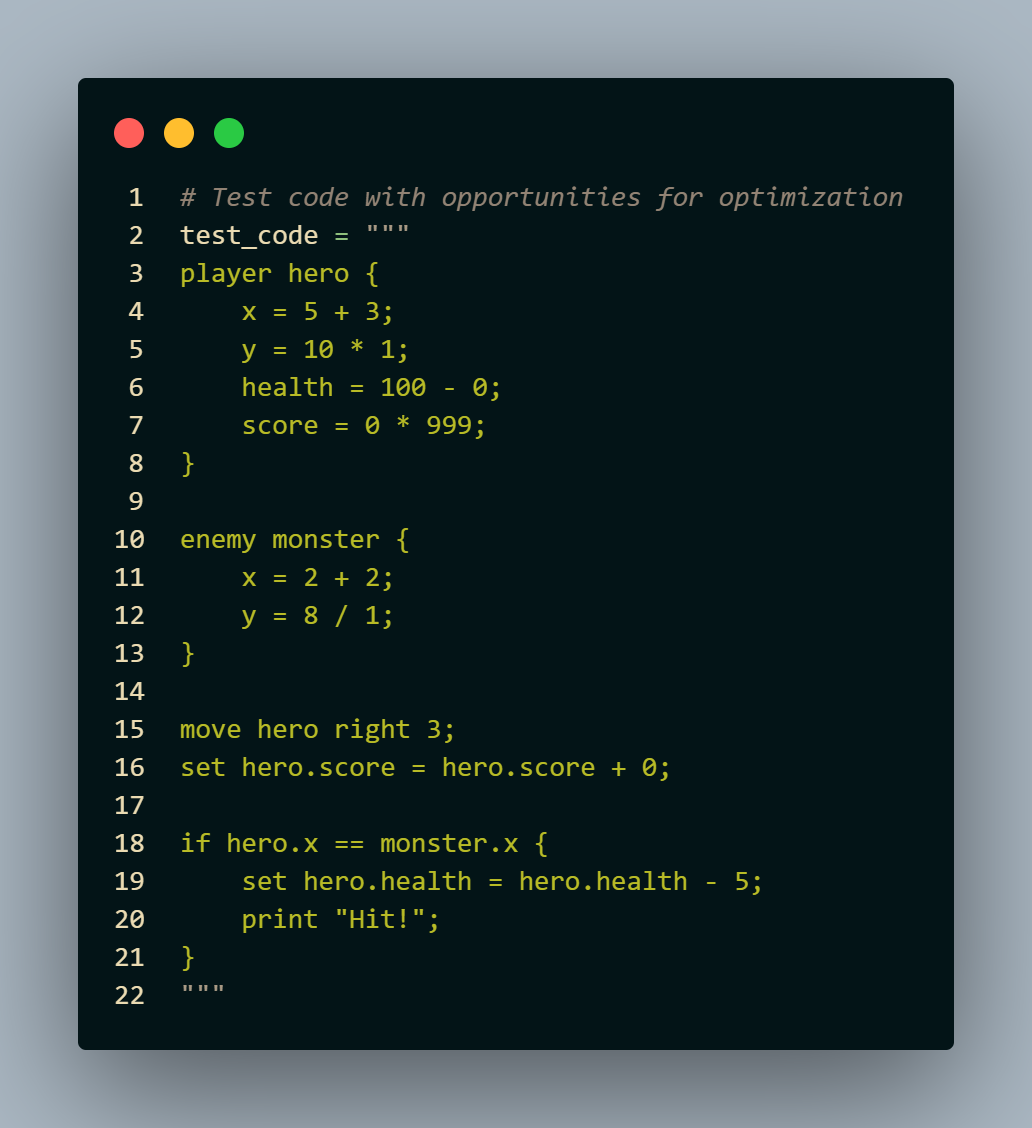


# Stage 5 - Code Optimization

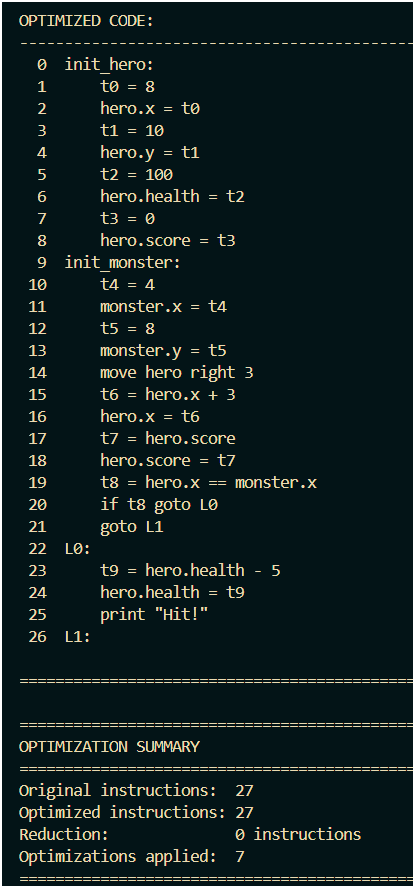
## Functions



## Input



## Output

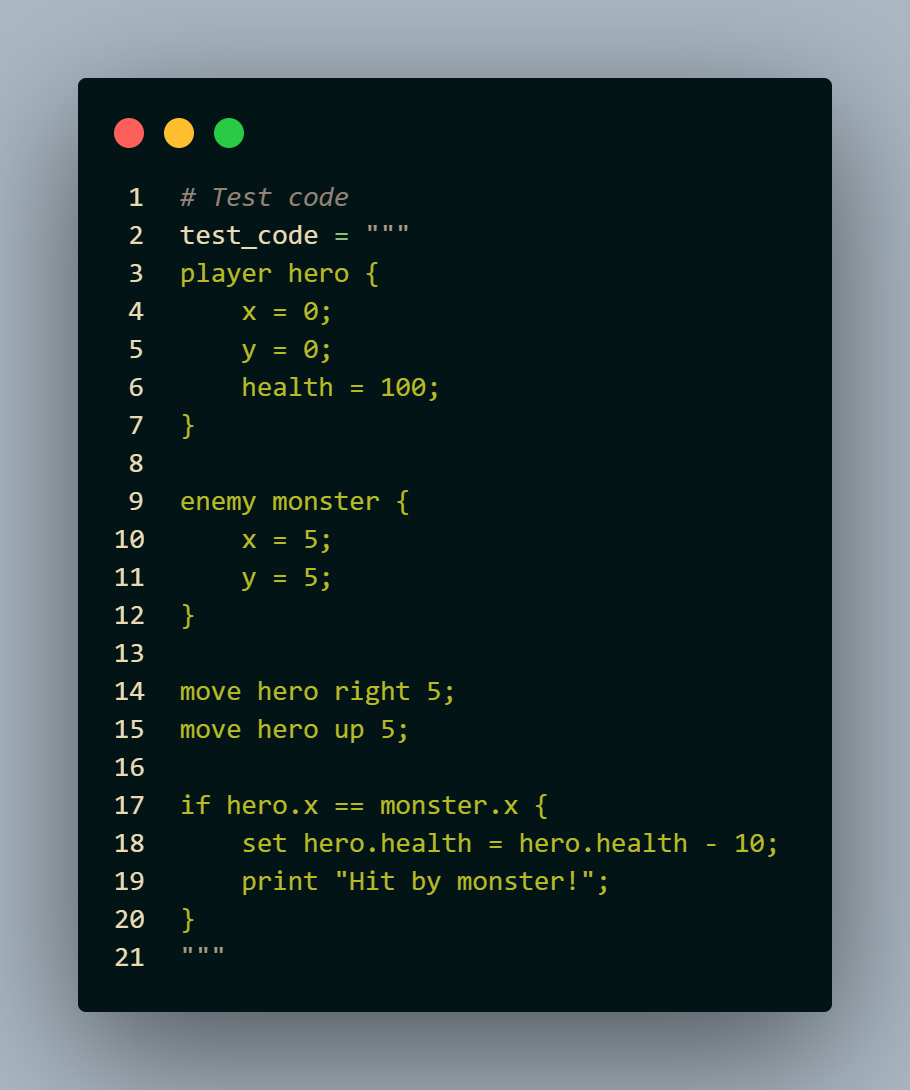


# Stage 6 - Code Generation

# Functions



## Input



## Output

