program = header , namespace, “int main()” “{“, declare\_instruction , code\_block, “}” ;

header = “#include<iostream>” ;

namespace = “using namespace std;” ;

code\_block = instruction\_list, “return 0;” ;

instruction\_list = {instruction} ;

instruction = io\_instruction“;” | assign\_instruction“;”

io\_instruction = input\_instruction | output\_instruction ;

input\_instruction = “cin>>”ID

output\_instruction = “cout<<”ID | CONST

declare\_instruction = type ID{“,” ID} ;

assign\_instruction = ID “=” CONST | ID {operator, CONST | ID} ;

type = “int”;

digit = [0-9] ;

number = ^[0-9]\\.\*[0-9]\*$ ;

letter = [a-z]+ ;

ID = ^[a-z][a-z0-9]{0,7}$ ;

CONST = number

operator = “+” | “-“ | “/” | “\*” ;