cis112-2025-1-e2midterm-2-Q2-g1: integer literals in Java

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Introduction

You have done EBNF validator in Project-2. In Midterm-2, you extend that work to integer literals.

ToDo

D0. Common material

Consider `cis000_common` package.

1. Update `StudentInfo` with your info.
2. Read `ExamInLab-forStudents.pdf` carefully.

D1. Integer Literal

1. Complete `Validator_IntegerLiteral`.
2. You can use `Validator_IntegerLiteral_Test` during your development.
3. Evaluate your code with `TS_Validator_IntegerLiteral_jUnit`.

   Warning. Do not change `TS_Validator_IntegerLiteral_jUnit`.

EBNF: method in Java (simplified)

```
integer_literal     = decimal_integer
                    | hex_integer
                    | binary_integer ;


decimal_integer    = decimal_digit, { decimal_digit | "_" }
                       , [ integer_type_suffix ] ;

hex_integer        = "0", ( "x" | "X" ), hex_digit, { hex_digit | "_" }
                       , [ integer_type_suffix ] ;

binary_integer     = "0", ( "b" | "B" ), binary_digit, { binary_digit | "_" }
                       , [ integer_type_suffix ] ;

integer_type_suffix = "l" | "L" ;  // long suffix


decimal_digit      = "0".."9" ;

hex_digit          = "0".."9" | "a".."f" | "A".."F" ;

binary_digit       = "0" | "1" ;
```