

Expressions classes example

```
public abstract class Expression {
    public abstract int getValue();
    public abstract String format();
}

public class IntegerExpression extends Expression {
    private int integer;

    IntegerExpression(int integer) {
        this.integer = integer;
    }

    public int getValue() {
        return integer;
    }

    public String format() {
        return String.valueOf(integer);
    }
}

public class SumExpression extends Expression {
    private final Expression term1;
    private final Expression term2;

    SumExpression(Expression term1, Expression term2) {
        this.term1 = term1;
        this.term2 = term2;
    }

    public int getValue() {
        return term1.getValue() + term2.getValue();
    }

    public String format() {
        return String.format("(%s_+_s)", term1.format(), term2.format());
    }
}

import org.junit.Test;

import static org.junit.Assert.*;

public class ExpressionTest {
    @Test
    public void integerExpressions() {
        Expression one = new IntegerExpression(1);
        assertEquals(1, one.getValue());
        assertEquals("1", one.format());
    }

    @Test
    public void sumExpressions() {
        Expression one = new IntegerExpression(1);
        Expression two = new IntegerExpression(2);
        Expression sum = new SumExpression(one, two);
    }
}
```

```

    assertEquals(3, sum.getValue());
    assertEquals("(1_+_2)", sum.format());
    Expression biggerSum = new SumExpression(sum, new IntegerExpression(3));
    assertEquals(6, biggerSum.getValue());
    assertEquals("((1_+_2)_+_3)", biggerSum.format());
}
}

```