

In-class Exercise

```
abstract class Expression
{
    public abstract int result(); //equivalent to pure virtual
```

```

}
class Operand extends Expression
{
    int value;
    public int result(){ return value;}
    Operand(int v){
        value = v;
    }
}
```

```
class Subtraction extends AE
{
    public int result() {
        return left.result() – right.result();
    }
}
```

```
Subtraction(Expression left, Expression right){
    super(left, right);
}
}
```

```
class AE extends Expression
{
    protectedExpression left;
    protectedExpression right;
    public abstract int result();
    AE(Expression l, Expression r){
        left = l;
        right = r;
    }
}
```

$8 \times 9 + 1 \times 6;$

**new Addition(new Multiply(new Operand(8),new
Operand(9)),new Multiply(new Operand(1), new
Operand(6))).result()**

$8 \times (9 + 1) \times 6;$

**new Multiply(new Multiply(new Addition(new
Operand(9),new Operand(1)),new Operand(6)),new
Operand(8)).result()**