**Ideagen – Remote Test**

**Time Taken: 5 hours**

**Summary**

* Result will be displayed in main() class.
* Program does not taking care calculation strings with double brackets.

**Methods:**

1. **calculate(String sum)**

* Method will call checkOpPreced and doMath methods.

1. **doMath(String calString)**

* Method check for content of the strings and determine type of Math Operations.
* Content inside bracket will be taken care first.
* doMath will call MathOperation method for Arithmetic operations.

1. **checkOpPreced(String inputStr)**

* Method check for operator precedence. If a string contains Multiply or Divide operation, calculation need to be performed first.

1. **MathOperation(BigDecimal firstNum, BigDecimal secondNum, String operator)**

* Method to determine type of Math operation based on operator passed in.

1. **isNumeric(String strNum)**

* Method to check whether the string passing in is a number.
* Checking the string by using Regular expressions.
* Return false if it doesn’t match the pattern.