Create a calculator to perform:

1) Arithmetic operation 2) Scientific operation 3) Trigonometric operation with individual operations separately or combined with binary operation or multiple operation at a stretch (which is mutation state). A console input has to be taken until return key is pressed. Once the return key is pressed the equation has to be evaluated with error handling.

Evaluate the equation from left to right (no priority to be taken at this stage)

Hint: Step 1: create new java project 2.

Step 2: create functional interface Arithmetic.

Step 3: create Enum ScintificOp which has constant abs, sqrt

Step 4: create Enum TrignometircOp which has constants sin, tan, cos, sec.

Step 5: create the class Add, Sub, Mul, Div and Percent which over rides the method of Arithmetic.

Step 6: create Expression\_evaluator Class to evaluate Airthmetic, trigonometric and scientific operation it should evaluate the expression of kind "10 + sqrt(4) + sin(90)". ( of any combination and any length from left to right).

Step 7: Add Date evaluator class to evaluate date as below using functional programming .

Add (date, integer ) : number of day is added to date to give new date

Add (date, date): two dates are to give new date

Sub(date, integer) number of days are subtracted from existing date to give new date

Sub(date, date) two date are subtracted to give number of day in difference(integer value as output)

Step 8 Now you should have Date\_Evaluator class to evaluate the date and Expression\_Evaluator to evaluate Arithmetic expressions, scientific expression and trigonometric expression.

Step 9: create main class to evaluate the expression given.