

According to <https://issues.apache.org/jira/browse/FLINK-9740> this issue, I have a general idea:

- Increase in `DataStreamLogicalWindowAggregateRule.scala` processing logic of the month

```
call.getOperands.get(idx) match {
  case v: RexLiteral if v.getTypeName.getFamily == SqlTypeFamily.INTERVAL_DAY_TIME =>
    case v: RexLiteral if v.getTypeName.getFamily ==
SqlTypeFamily.INTERVAL_DAY_TIME =>
      v.getValue.asInstanceOf[JBigDecimal].longValue()
      v.getValue.asInstanceOf[JBigDecimal].longValue()
    case v: RexLiteral if v.getTypeName.getFamily ==
SqlTypeFamily.INTERVAL_YEAR_MONTH =>
      v.getValue.asInstanceOf[JBigDecimal].longValue()
    case _ => throw new TableException("Only constant window intervals with
millisecond and months resolution are supported.")
}
```

- Increase in `DataStreamGroupWindowAggregate.scala` processing logic of the month

```
case TumblingGroupwindow(_, timeField, size)
  if isRowtimeAttribute(timeField) && isMonthsIntervalLiteral(size) =>
    stream.window(TumblingEventTimeWindows.of(toMonths(size)))
```

- Increase in `ExpressionUtils.scala` processing logic of the month

```
private[flink] def isMonthsIntervalLiteral(expr: Expression): Boolean = expr match
{
  case Literal(_, TimeIntervalTypeInfo.INTERVAL_MONTHS) => true
  case _ => false
}
private[flink] def toMonths(expr: Expression): FlinkTime = expr match {
  case Literal(value: Long, TimeIntervalTypeInfo.INTERVAL_MONTHS) =>
    FlinkTime.months(value)
  case _ => throw new IllegalArgumentException()
}
```

- I want to add a `WindowTimeAssigner` to `assignWindows` method to assign the month logic be `TumblingEventTimeWindows` these inheritance

```
Date date = new Date(timestamp);
Calendar cal = Calendar.getInstance();
cal.setTime(date);
cal.add(Calendar.MONTH, monthSize);
this.size = cal.getTimeInMillis() - timestamp;
```

- Add tests to `groupwindowtest.scala`

```
@Test
def TestWindowForMonthsInterval(): Unit = {
  RunWindowForMonthsInterval("TUMBLE", "interval '10' month")
  RunWindowForMonthsInterval("TUMBLE", "INTERVAL '2-10' YEAR TO MONTH")
  RunWindowForMonthsInterval("HOP", "INTERVAL '1' MONTH, INTERVAL '10' MONTH")
  RunWindowForMonthsInterval("HOP", "INTERVAL '1' MONTH, INTERVAL '2-10' YEAR TO
MONTH")
  RunWindowForMonthsInterval("SESSION", "interval '10' month")
  RunWindowForMonthsInterval("SESSION", "INTERVAL '2-10' YEAR TO MONTH")
}
```