

**TimeSession GetTimeSession(datetime currtime)**

- Return the TimeSession (enum – with value like US, London, Australia, Tokyo) when I input the currtime, and based on my Metatrader timezone return the TimeSession

**bool IsNewHigh(int i), bool IsNewLow(int i)**

Given a candlestick index I, I want to know whether it is the new high. Can make the number of candles to check previously as parameters.

**bool isBOHTOH (datetime Start, datetime End)**

BOH is bottom of hour, time like xx:30

TOH is top of hour, time like xx:00.

Given a start and end date time, see whether it crosses any BOH or TOH, if yes return true. e.g., start =2017.5.21 8:27, end= 2017.5.21 8:31, then it returns true is since 8:30 is BOH.

**double RNFromTop(double price),double RNFromBottom(double price)**

RN = Round Number, price ending with 00

Find the number of pips for RN just larger than price (RNFromTop), and RN just lower than the price (RNFromBottom)

**double BRNFromTop(double price),double BRNFromBottom(double price)**

BRN = Big Round Number, ending with 000

Same as previous function

**int isInsideBar (int i, int howFarToLook)**

given a candlestick with index i, I want to return the index of mother bar that contained the candlestick at i

[https://www.google.com/search?q=inside+bar&source=lnms&tbm=isch&sa=X&ved=0ahUKEwiX7bzlgIHUAhUSSo8KHfLwDpwQ\\_AUICigB&biw=1227&bih=499#imgrc=9109mxz8TQaZ7M](https://www.google.com/search?q=inside+bar&source=lnms&tbm=isch&sa=X&ved=0ahUKEwiX7bzlgIHUAhUSSo8KHfLwDpwQ_AUICigB&biw=1227&bih=499#imgrc=9109mxz8TQaZ7M)).

Notice that the mother can be several bars away, look at the top chart of

<http://imgur.com/a/PoNOT>

where 3 is mother bar of 1 and 2 (if 3 is mother bar of 1, it must be mother bar of all candle between 3 and 1 too). And howFarToLook is to set how far we should check whether current candle is included in a mother bar.