

```
#property copyright "Copyright 2022, MetaQuotes Ltd."
```

```
#property link      "https://www.mql5.com"
```

```
#property version   "1.00"
```

```
//+-----+
```

```
//| Include |
```

```
//+-----+
```

```
#include <Trade\Trade.mqh>
```

```
//+-----+
```

```
//| Input Variables |
```

```
//+-----+
```

```
input int InpFastPeriod = 5;
```

```
input int InpSlowPeriod = 10;
```

```
input int InpStopLoss = 100;
```

```
input int InpTakeProfit = 200;
```

```
//+-----+
```

```
//| Global Variables |
```

```
//+-----+
```

```
int fastHandle;
```

```
int slowHandle;
```

```
double fastBuffer[];
```

```
double slowBuffer[];
```

```
datetime openTimeBuy = 0;
```

```
datetime openTimeSell = 0;
```

```
CTrade trade;
```

```
//+-----+
```

```
//| Expert initialization function |
```

```
//+-----+
```

```
int OnInit(){
```

```
if(InpFastPeriod <= 0)
```

```

{
    Alert("Fast Period <= 0");
    return INIT_PARAMETERS_INCORRECT;
}

if(InpSlowPeriod <= 0)
{
    Alert("Slow Period <= 0");
    return INIT_PARAMETERS_INCORRECT;
}

if(InpFastPeriod >= InpSlowPeriod)
{
    Alert("InpFastPeriod >= InpSlowPeriod");
    return INIT_PARAMETERS_INCORRECT;
}

if(InpStopLoss <= 0)
{
    Alert("Stop Loss <= 0");
    return INIT_PARAMETERS_INCORRECT;
}

if(InpTakeProfit <= 0)
{
    Alert("Take Profit <= 0");
    return INIT_PARAMETERS_INCORRECT;
}

//Create handles
fastHandle = iMA(_Symbol, PERIOD_CURRENT, InpFastPeriod, 0, MODE_SMA, PRICE_CLOSE);
if(fastHandle == INVALID_HANDLE){
    Alert("Failed to create fast handle");
    return INIT_FAILED;
}

```

```
}
```

```
slowHandle = iMA(_Symbol, PERIOD_CURRENT, InpSlowPeriod,0 , MODE_SMA, PRICE_CLOSE);
```

```
if(slowHandle == INVALID_HANDLE){
```

```
Alert("Failed to create slow handle");
```

```
return INIT_FAILED;
```

```
}
```

```
ArraySetAsSeries(fastBuffer, true);
```

```
ArraySetAsSeries(slowBuffer, true);
```

```
return(INIT_SUCCEEDED);
```

```
}
```

```
//+-----+
```

```
//| Expert deinitialization function |
```

```
//+-----+
```

```
void OnDeinit(const int reason){
```

```
if(fastHandle != INVALID_HANDLE){
```

```
IndicatorRelease(fastHandle);
```

```
}
```

```
if(slowHandle != INVALID_HANDLE){
```

```
IndicatorRelease(slowHandle);
```

```
}
```

```
}
```

```
//+-----+
```

```

//| Expert tick function |
//+-----+

void OnTick(){
int values = CopyBuffer(fastHandle, 0, 0, 2, fastBuffer);
if(values != 2)
{
Print("Not enough data for fast moving average");
return;
}

values = CopyBuffer(slowHandle, 0, 0, 2, slowBuffer);
if(values != 2)
{
Print("Not enough data for slow moving average");
return;
}

Comment("fast[0]:", fastBuffer[0], "\n",
        "fast[1]:", fastBuffer[1], "\n",
        "slow[0]:", slowBuffer[0], "\n",
        "slow[1]:", slowBuffer[1], "\n");

//Check for cross buy

if(fastBuffer[1] <= slowBuffer[1] && fastBuffer[0] > slowBuffer[0] && openTimeBuy !=
iTime(_Symbol, PERIOD_CURRENT, 0)){
openTimeBuy = iTime(_Symbol, PERIOD_CURRENT, 0);
double ask = SymbolInfoDouble(_Symbol, SYMBOL_ASK);
double sl = ask - InpStopLoss * SymbolInfoDouble(_Symbol, SYMBOL_POINT);
double tp = ask + InpTakeProfit * SymbolInfoDouble(_Symbol, SYMBOL_POINT);

trade.PositionOpen(_Symbol, ORDER_TYPE_BUY, 1.0, ask, sl, tp, "Cross EA");
}

```

```

    }

    //Check for cross sell

    if(fastBuffer[1] >= slowBuffer[1] && fastBuffer[0] < slowBuffer[0] && openTimeSell !=
iTime(_Symbol, PERIOD_CURRENT, 0)){

        openTimeSell = iTime(_Symbol, PERIOD_CURRENT, 0);

        double bid = SymbolInfoDouble(_Symbol, SYMBOL_BID);

        double sl = bid + InpStopLoss * SymbolInfoDouble(_Symbol, SYMBOL_POINT);

        double tp = bid - InpTakeProfit * SymbolInfoDouble(_Symbol, SYMBOL_POINT);

        trade.PositionOpen(_Symbol, ORDER_TYPE_SELL, 1.0, bid, sl, tp, "Cross EA");

    }

}

```