## ซอสโค้ด การดำเนินการตามขอบเขตที่กำหนดผ่านตัวชี้วัด CCI บนรูปแบบการบริหารจัดการเงิน

ในส่วนนี้จะเป็นส่วนของซอสโค้ดของโปรแกรมที่ใช้ในโปรแกรม Metatrader 4 ของกลุ่ม การดำเนินการตามขอบเขตที่กำหนดผ่านตัวชี้วัด CCI บนรูปแบบการบริหารจัดการเงิน

```
#property copyright "KZM Type C Version.011, The project start at 8/02/2017
Software Corp."
                 "https://www.facebook.com/groups/239641229810857/?fref=ts"
#property link
enum MinZoneOpen{
 minopen0 = 25, //25 %
 minopen1 = 20, //20 %
 minopen2 = 15, //15 %
 minopen3 = 10, //10 %
 minopen4 = 5, \frac{1}{5} %
 minopen5 = 0, //0 %
};
enum MaxZoneOpen{
 maxopen0 = 50, //50 \%
 maxopen1 = 55, //55 \%
 maxopen2 = 60, //65 \%
 maxopen3 = 65, //65 \%
 maxopen4 = 70, //70 %
 maxopen5 = 75, //75 %
 maxopen6 = 80, //80 %
 maxopen7 = 85, //95 %
 maxopen8 = 90, //90 %
 maxopen9 = 95, //95 %
 maxopen10 = 100, //100 %
};
```

```
enum Zone Time{
 Zone Time0 = 1, //1 Minute
 Zone Time1 = 5, //5 Minute
 Zone Time2 = 15, //15 Minute
 Zone Time3 = 30, //30 Minute
 Zone Time4 = 60, //1 Hour
 Zone Time5 = 240, //4 Hour
 Zone Time6 = 1440, //1 Day
 Zone Time7 = 10080, //1 Weekly
 Zone Time8 = 43200, //1 Monthly
};
input string KZM Order Set 1 = "Order Setting.";
input int MagicExpert = 8025;
input bool UseZoneClose = TRUE;
input string CommentOrder = "FOREX KZM";
input double Lot = 0.01;
input bool AutoMaticLot = FALSE;
input bool CommentEA = TRUE;
input int MaxOrders = 20;
input Zone Time ZoneTime = Zone Time4;
input Zone Time IndicatorTime = Zone Time2;
input string _____Range_Percent_MaxMin_Set_2 = "Percent Of Zone Order.";
input bool UseCandHighPercent = TRUE;
input MaxZoneOpen MaximumZone = maxopen0;//UseMaximumZone;
input bool UseCandLowPercent = TRUE;
input MinZoneOpen MinimumZone = minopen0;//UseMinimumZone;
input int RangeCandlestick = 0;
int RangeCandlesticks = RangeCandlestick;
input bool UseLowZone = TRUE;
```

```
input string Manager Profile Set 3 = "Management Accountant.";
input int Slippage = 1;
input string _____Min_Deposit_4 = "Good capital for deposit";
double GridPerPipW;
double GridPerPip;
input double PipDepositTest = 0.0;
double PipDeposit = PipDepositTest;
double Ori;
double cm01,cmi02;
int maxsend;
double useGrid;
double o1;
double o2;
double llo2;
double save;
double maxh, minl;
void OnInit() {
  if (RangeCandlesticks == 0) {
        RangeCandlesticks = iBars(NULL,ZoneTime);
  }
}
void OnDeinit(const int reason)
{
  ObjectDelete("nameofea");
  ObjectDelete("zonemax");
  ObjectDelete("nameofaccount");
  ObjectDelete("accmoney");
  ObjectDelete("accshowtime");
  ObjectDelete("TradingMaxZone");
```

```
ObjectDelete("TradingLowZone");
  ObjectDelete("zonemin");
  ObjectDelete("fordeposit");
  ObjectDelete("forpip");
  ObjectDelete("forshowgrid");
  ObjectDelete("forshoworder");
  ObjectDelete("forlot");
  ObjectDelete("forneeddeposit");
}
int maxopen(int ai 0 = -1) {
  int n = 0;
  for (int li = OrdersTotal() - 1; li >= 0 && OrderSelect(li, SELECT BY POS); li--)
     if (OrderSymbol() == Symbol() && OrderMagicNumber() == MagicExpert && ai 0
== -1) {
       n++; } else
     if (ai 0 == OrderType() && OrderCloseTime() == 0) n++;
  return (n);
}
//+-----
// Expert tick function
//+-----+
void OnTick()
 {
   int Cand = RangeCandlesticks-1;
   double pj[500],pm[500],h1[500],minh,maxl,Zq,lgm,mizone;
   int x,j;
   double z = iHigh(Symbol(),NULL,0);
   double y = iLow(Symbol(),NULL,0);
   Ori = iClose(Symbol(),NULL,0);
   o1 = Ask;
```

```
o2 = Bid;
    for(x=0;x \le Cand; x++) \{
         z = iHigh(Symbol(),NULL,x);
         y = iLow(Symbol(),NULL,x);
         pj[x] = z;
         pm[x] = y;
                                 //Print("Bid=",z," of round=",x," in aray=",pj[x]);
                                 //Print("Bid=",y," of round=",x," in aray=",pm[x]);
}
     minh = pj[0];
     minl = pm[0];
    for(j=0; j \le Cand; j++) {
        if (UseCandHighPercent) {
               if(minh > pj[j]) {
                    minh = pj[j];
               } else
         if (maxh < pj[j]) {
               maxh = pj[j];
         }
                                        //Print("Max is:",maxh,"Min is:",minh);
       }
         if (UseCandLowPercent) {
                if(minl > pm[j]) {
                        minl = pm[j];
         } else
         if (maxl < pm[j]) {
                 maxl = pm[j];
         }
                                        //Print("Max is:",maxl,"Min is:",minl);
    }
```

```
}
                      //////////Zone
double cm;
     Zq = (maxh - minl);
     if (Digits == 3 || Digits == 5) {
          Zq = 10000.0 * Zq;//pip
      } else {
          Zq = 1000 * Zq; //pip
    }
                                       //Print("Zone all is:",Zq," Pips");
     cm = minl + (Zq / 10000); // cm = maxh
                                         //Print("Min + Pips:",cm);
     lgm = ((Zq / 100) * MaximumZone);
                                       //Print("Zone Max is:",lgm," Pips");
     if (Digits == 3 || Digits == 5) {
     cm01 = minl + (lgm / 10000);//////Zone Maximum.
                                        //Print("Zone Max is:",cm01);
     mizone = ((Zq / 100) * MinimumZone);
                                       //Print("Zone Min is:",mizone," Pips");
     if (Digits == 3 || Digits == 5) {
         cmi02 = minl + (mizone / 10000);/////Zone Minimum.
                                         //Print("Zone Min is:",cmi02);
     }
         GridPerPip = (cm01 - cmi02) / MaxOrders;
         useGrid = GridPerPip;
     if (Digits == 3 || Digits == 5) {
         GridPerPipW = (GridPerPip / Point) / 10.0;
```

```
}
/////////Zone End.
   maxsend = maxopen();
double Mlot = Lot*10;
   if (PipDeposit == 0.0) {
       PipDeposit = (maxh - minl)/Point/10;
   }
///////////////start Cal
   double llo;
   for(int h=0; h <= MaxOrders; h++) {
      h1[h] = ((PipDeposit - GridPerPipW * h) * Mlot) / MarketInfo( Symbol(),
MODE TICKVALUE);
   llo += h1[h];
   llo2 = MathAbs(llo);
///////////end cal
   if (!UseLowZone) {
      int pop = 0;
   } else
   if (UseLowZone)
       pop = 1;
   if (AccountBalance() >= llo2 && cmi02 > 0.0 && cm01 > 0.0 && Ori >= cmi02 *
pop && Ori <= cm01 && maxsend < MaxOrders) {
```

```
if(iCCI(Symbol(),IndicatorTime,36,PRICE_CLOSE,0 >= 100) &&
iCCI(Symbol(),IndicatorTime,36,PRICE CLOSE,1 < 100)) {
                  if (maxsend == 0) {
                       if(OrderSend( Symbol(), OP BUY, callotsize(), Ask, Slippage *
10, 0, 0, CommentOrder + ":" + OrdersTotal(), MagicExpert, 0, Blue ))
                             maxsend++;
                             Print("KZM BUY ORDER!" + OrdersTotal());
                 } else if (OrderMagicNumber() == MagicExpert && maxsend > 0) {
                                                           Grid();
              }
         }
    }
     if (maxsend > 0) {
          if (UseZoneClose && Ori > cm01) {
                             ExitClose();
          } else if (!UseZoneClose) {
                             ExitClose();
       }
    }
     if (CommentEA) {
           showmanycomment();
   }
}
void ExitClose() {
      int res = 0;
      if((OrderSymbol() == Symbol()) && (OrderMagicNumber() == MagicExpert)) {
        if(OrderType()==OP BUY) {
```

```
if (iCCI(Symbol(),IndicatorTime,36,PRICE CLOSE,0 <= -100) &&
iCCI(Symbol(),IndicatorTime,36,PRICE CLOSE,1 > -100) && OrderProfit() +
OrderCommission() + OrderSwap() > 0.0) {
                  res = OrderClose(OrderTicket(), OrderLots(),
NormalizeDouble(Bid,Digits), Slippage * 10, Blue);
                   Print("Order Closed buy!"); } }
       }
      if (save == 0) {
           save = AccountBalance() / 2;
      } else
      if (save > 0 && AccountBalance() < save) {
             res = OrderClose(OrderTicket(), OrderLots(), NormalizeDouble(Bid,Digits),
Slippage * 10, Blue);
             Print("Order Closed buy!");
     }
}
void buy() {
   int ticket2;
   ticket2 = OrderSend( Symbol(), OP_BUY, callotsize(), Ask, Slippage * 10, 0, 0,
CommentOrder + ":" + OrdersTotal(), MagicExpert, 0, Blue );
   if (ticket2 > 0){
           maxsend++;
           Print("KZM BUY ORDER!" + OrdersTotal());
   } else {
           Print("ERROR SEND ORDER!!");
   }
}
void Grid() {
   if (OrderSymbol() == Symbol() && OrderComment() == CommentOrder + ":0") {
```

```
if (o1 > OrderOpenPrice()) {
             for(int g = 1; g \le MaxOrders-1; g++) {
                  if (maxsend == g && o1 > OrderOpenPrice() + useGrid * g) {
                                                          buy();
                  }
             }
        } else
  if (o2 < OrderOpenPrice()) {</pre>
             for(int a = 1; a \le MaxOrders-1; a++) {
                  if (maxsend == a && o2 < OrderOpenPrice() - useGrid * a) {
                                                          buy();
                  }
             }
   }
 }
}
double callotsize() {
  double callot;
  if (AutoMaticLot) {
       callot = (AccountBalance() / llo2) * Lot;
  } else {
       callot = Lot;
  }
  return (callot);
}
void showmanycomment() {
  string nameea = "nameofea", showhzone = "zonemax", accountname =
"nameofaccount", accbalace = "accmoney", acctime = "accshowtime",
MaxzoneForTrade = "TradingMaxZone";
```

```
string LowzoneForTrade = "TradingLowZone", showlzone = "zonemin", deposit =
"fordeposit", pip = "forpip", showgrid = "forshowgrid", showorders = "forshoworder",
showlot = "forlot", NeedDeposit = "forneeddeposit";
  ObjectCreate(nameea, OBJ LABEL, 0, 0, 0, 0);
  ObjectSet(nameea, OBJPROP XDISTANCE, 10);
  ObjectSet(nameea, OBJPROP YDISTANCE, 20);
  ObjectSetText(nameea, "KZM v0.11 Forex ea", 13, "Broadway", Gold);
  ObjectCreate(showhzone, OBJ LABEL, 0, 0, 0, 0);
  ObjectSet(showhzone, OBJPROP_XDISTANCE, 10);
  ObjectSet(showhzone, OBJPROP YDISTANCE, 39);
  ObjectSetText(showhzone, "HZone: " + DoubleToStr(maxh, 5), 10, "@Arial
Unicode MS", clrAquamarine);
  ObjectCreate(MaxzoneForTrade, OBJ LABEL, 0, 0, 0, 0);
  ObjectSet(MaxzoneForTrade, OBJPROP XDISTANCE, 10);
  ObjectSet(MaxzoneForTrade, OBJPROP YDISTANCE, 52);
  ObjectSetText(MaxzoneForTrade, "Max zone trading: " + DoubleToStr(cm01, 5),
10, "@Arial Unicode MS", clrAquamarine);
  ObjectCreate(LowzoneForTrade, OBJ LABEL, 0, 0, 0, 0);
  ObjectSet(LowzoneForTrade, OBJPROP XDISTANCE, 10);
  ObjectSet(LowzoneForTrade, OBJPROP YDISTANCE, 68);
  ObjectSetText(LowzoneForTrade, "Min zone trading: " + DoubleToStr(cmi02, 5),
10, "@Arial Unicode MS", clrAquamarine);
  ObjectCreate(showlzone, OBJ LABEL, 0, 0, 0, 0);
  ObjectSet(showlzone, OBJPROP XDISTANCE, 10);
  ObjectSet(showlzone, OBJPROP YDISTANCE, 84);
```

```
ObjectSetText(showlzone, "Lzone: " + DoubleToStr(minl, 5), 10, "@Arial Unicode
MS", clrAquamarine);
  ObjectCreate(deposit, OBJ LABEL, 0, 0, 0, 0);
  ObjectSet(deposit, OBJPROP XDISTANCE, 10);
  ObjectSet(deposit, OBJPROP_YDISTANCE, 100);
  ObjectSetText(deposit, "Recommended Minimum Capital: " + DoubleToStr(llo2,
1) + "USD.", 10, "@Arial Unicode MS", clrAquamarine);
  ObjectCreate(deposit, OBJ LABEL, 0, 0, 0, 0);
  ObjectSet(deposit, OBJPROP XDISTANCE, 10);
  ObjectSet(deposit, OBJPROP YDISTANCE, 100);
  ObjectSetText(deposit, "From: " + DoubleToStr(PipDeposit, 1) + "Pips.", 10, "@Arial
Unicode MS", clrAquamarine);
  ObjectCreate(showgrid, OBJ LABEL, 0, 0, 0, 0);
  ObjectSet(showgrid, OBJPROP XDISTANCE, 10);
  ObjectSet(showgrid, OBJPROP YDISTANCE, 116);
  ObjectSetText(showgrid, "GridPer: " + DoubleToStr(GridPerPipW,5) + "Pips.", 10,
"@Arial Unicode MS", clrAquamarine);
  ObjectCreate(accountname, OBJ LABEL, 0, 0, 0, 0);
  ObjectSet(accountname, OBJPROP XDISTANCE, 10);
  ObjectSet(accountname, OBJPROP YDISTANCE, 132);
  ObjectSetText(accountname, "Name: " + AccountName(), 10, "@Arial Unicode
MS", clrAquamarine);
  ObjectCreate(accbalace, OBJ LABEL, 0, 0, 0, 0);
  ObjectSet(accbalace, OBJPROP XDISTANCE, 10);
  ObjectSet(accbalace, OBJPROP YDISTANCE, 148);
```

```
ObjectSetText(accbalace, "Balance: " + AccountBalance() + ""+
AccountCurrency(), 10, "@Arial Unicode MS", clrAquamarine);
  ObjectCreate(acctime, OBJ LABEL, 0, 0, 0, 0);
  ObjectSet(acctime, OBJPROP XDISTANCE, 10);
  ObjectSet(acctime, OBJPROP_YDISTANCE, 164);
  ObjectSetText(acctime, "Date - Time: " + TimeToStr(TimeLocal()), 10, "@Arial
Unicode MS", clrAquamarine);
  ObjectCreate(showorders, OBJ LABEL, 0, 0, 0, 0);
  ObjectSet(showorders, OBJPROP XDISTANCE, 10);
  ObjectSet(showorders, OBJPROP YDISTANCE, 180);
  ObjectSetText(showorders, "MaxOrders: " + IntegerToString(maxsend), 10, "@Arial
Unicode MS", clrAquamarine);
  ObjectCreate(showlot, OBJ LABEL, 0, 0, 0, 0);
  ObjectSet(showlot, OBJPROP XDISTANCE, 10);
  ObjectSet(showlot, OBJPROP YDISTANCE, 196);
  ObjectSetText(showlot, "Lot is: " + DoubleToStr(Lot, 2), 10, "@Arial Unicode MS",
clrAquamarine);
  ObjectCreate(NeedDeposit, OBJ LABEL, 0, 0, 0, 0);
  ObjectSet(NeedDeposit, OBJPROP XDISTANCE, 10);
  ObjectSet(NeedDeposit, OBJPROP YDISTANCE, 212);
  ObjectSetText(NeedDeposit, " Minimum Capital : " + DoubleToStr(llo2, 1) +" "+
AccountCurrency(), 10, "@Arial Unicode MS", clrAquamarine);
}
```