```
# 导入模块

from HslCommunication import SiemensS7Net
from HslCommunication import SiemensPLCS
# 数据处理

# 定义读取数据
def printReadResult(result):
    if result.IsSuccess:
        print(result.Content)
    else:
        print("错误：" + result.Message)

# 定义写入数据

def printWriteResult(result):
    if result.IsSuccess:
        print("写入成功！")
    else:
        print("错误：" + result.Message)

if __name__ == "__main__":
    # 建立PLC
    print("建立PLC")
    siemens = SiemensS7Net(SiemensPLCS.S1200, "192.168.3.23")
    # 开始连接
    print("开始连接")

    if not siemens.ConnectServer().IsSuccess:
        print("PLC连接失败")
    else:
        # 分步读写测试
        # 布尔读写测试
        # siemens.WriteBool("DB102.0.0", True)
        # printReadResult(siemens.ReadBool("DB26.4.0"))
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# 字节读写测试
# siemens.WriteByte("DB102.1", 58)
# printReadResult(siemens.ReadByte("DB102.1"))

# # 16位整数读写测试
# siemens.WriteInt16("DB102.2", 12358)
printReadResult(siemens.ReadInt16("DB26.4"))
printReadResult(siemens.ReadInt16("DB26.6"))
printReadResult(siemens.ReadInt16("DB26.8"))
printReadResult(siemens.ReadInt16("DB26.10"))
printReadResult(siemens.ReadInt16("DB26.12"))

# 16位整数读写测试
# siemens.WriteInt16("DB102.4", -12358)
# printReadResult(siemens.ReadInt16("DB102.4"))
#
# # 16位整数读写测试
# siemens.WriteUInt16("DB102.6", 52358)
# printReadResult(siemens.ReadUInt16("DB102.6"))
#
# # 32位整数读写测试
# siemens.WriteInt32("DB102.8", 12345678)
# printReadResult(siemens.ReadInt32("DB102.8"))
#
# # 32位整数读写测试
# siemens.WriteInt32("DB102.12", -12345678)
# printReadResult(siemens.ReadInt32("DB102.12"))
#
# # 32位整数读写测试
# siemens.WriteUInt32("DB102.16", 123456789)
# printReadResult(siemens.ReadInt32("DB102.16"))
#
# # 64位整数读写测试
# siemens.WriteInt64("DB102.20", 12345678901234)
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# printReadResult(siemens.ReadInt64("DB102.20"))
#
# # 小数读写测试
# siemens.WriteFloat("DB102.24", 123.456)
# printReadResult(siemens.ReadFloat("DB102.24"))
#
# # 长小数读写测试
# siemens.WriteDouble("DB102.28", 123.456789)
# printReadResult(siemens.ReadDouble("DB102.28"))
#
# # 字符串读写测试
# siemens.WriteString("DB102.36", '123456')
# printReadResult(siemens.ReadString("DB102.36", 6))
#
# # 16位数组读写测试
# siemens.WriteInt16("DB102.48", [12, 34, 56, -78, 90, 98, 76, -54, 32, 10])
# printReadResult(siemens.ReadInt16("DB102.48", 10))
#
# # 批量读取数据上面数组
# read = siemens.Read("DB102.48", 10)
# if read.IsSuccess:
#     m120 = read.Content[0]
#     m121 = read.Content[1]
#     m122 = read.Content[2]
#     m123 = read.Content[3]
#     m124 = read.Content[4]
#     m125 = read.Content[5]
#     m126 = read.Content[6]
#     m127 = read.Content[7]
#     m128 = read.Content[8]
#     m129 = read.Content[9]
#
# else:
#     print(read.Message)
#
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```
    # read = siemens.Read("DB102.68", 20)
    # if read.IsSuccess:
    #     count = siemens.byteTransform.TransInt32(read.Content, 0)
    #     temp = siemens.byteTransform.TransSingle(read.Content, 2)
    #     name1 = siemens.byteTransform.TransInt16(read.Content, 8)
    #     barcode = read.Content[10:20].decode('ascii')

# 关闭连接
siemens.ConnectClose()
```