

爬虫 - JS 逆向 01 - 新X盟解密

什么是逆向：

逆向工程（又称逆向技术），是一种产品设计技术再现过程，即对一项目标产品进行逆向分析及研究，从而演绎并得出该产品的处理流程、组织结构、功能特性及技术规格等设计要素，以制作出功能相近，但又不完全一样的产品。逆向工程源于商业及军事领域中的硬件分析。其主要目的是在不能轻易获得必要的生产信息的情况下，直接从成品分析，推导出产品的设计原理。

逆向工程可能会被误认为是对知识产权的严重侵害，但是在实际应用上，反而可能会保护知识产权所有者。例如在集成电路领域，如果怀疑某公司侵犯知识产权，可以用逆向工程技术来寻找证据。

爬虫 - JS 逆向 01 - 新X盟解密 定期练习 定期提高

网站地址：



卷烟订货

登录账号

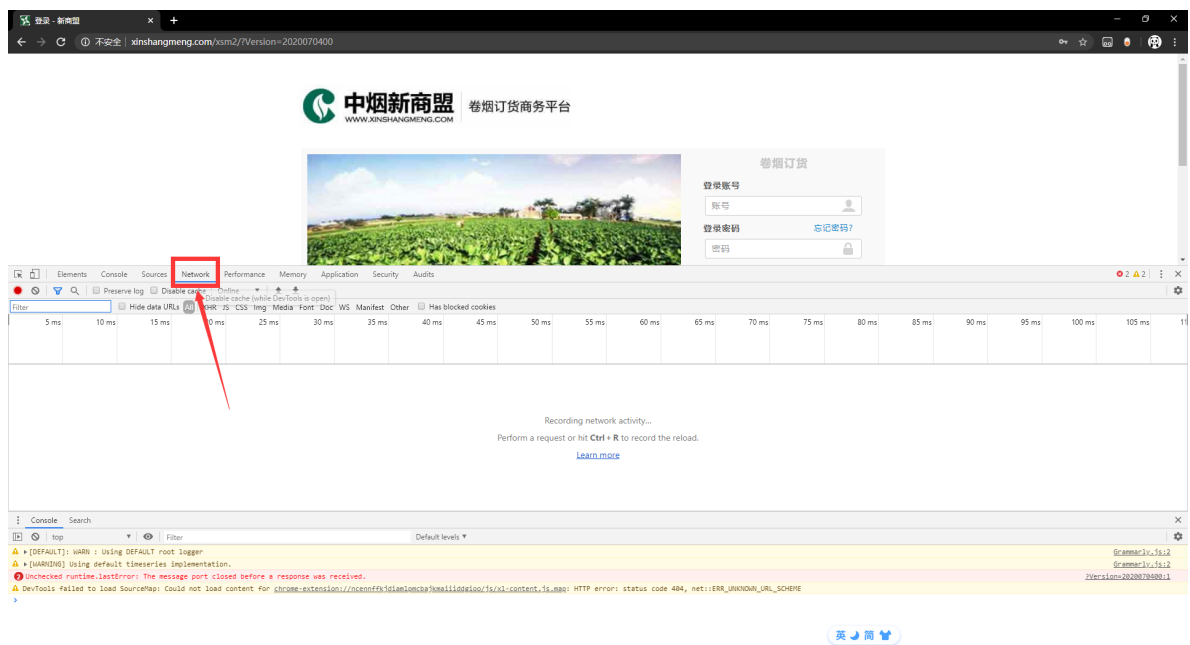
登录密码

[忘记密码?](#)

1.观察

需要账号、密码(废话)

2.打开开发者工具(右键 或者 F12)

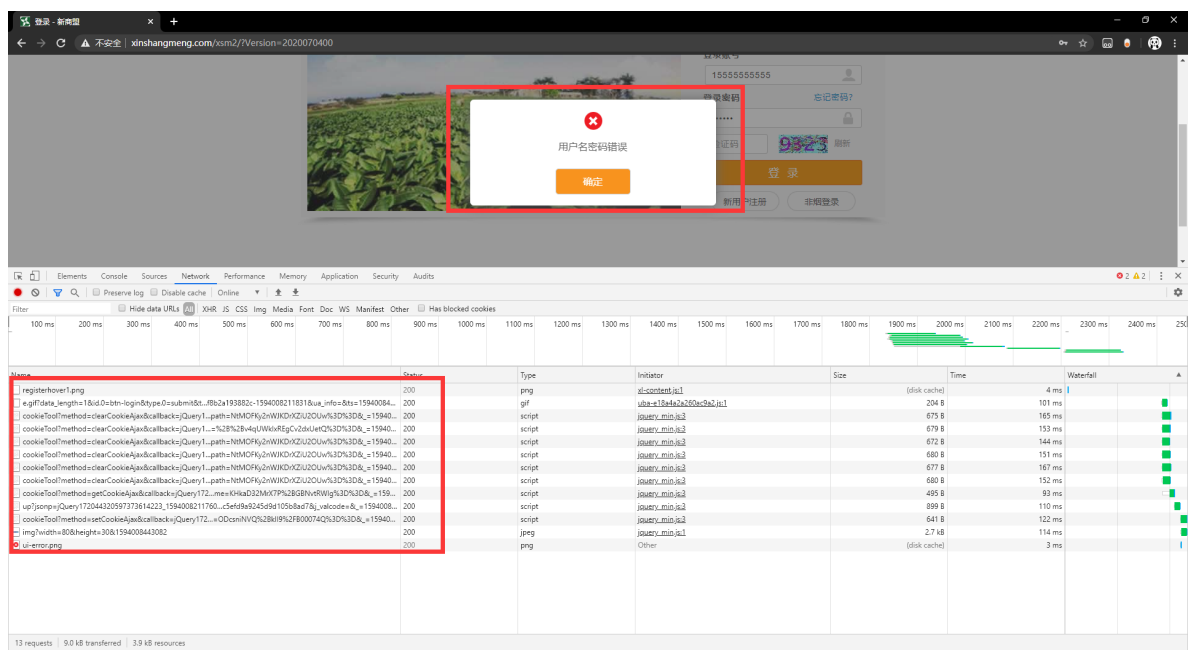


输入账号 155 5555 5555

输入密码 123456

这样方便我们在特征中检索到

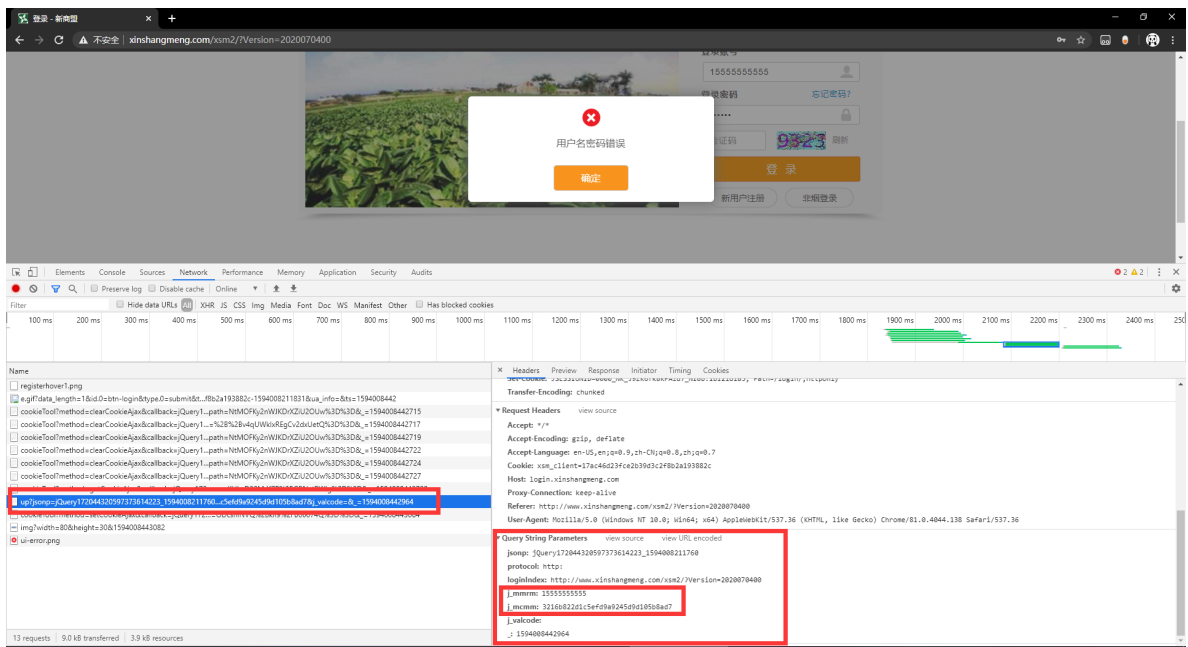
点击登录



Request URL:

http://login.xinshangmeng.com/login/users/dologin/up?jsonp=jQuery172044320597373614223_1594008211760&protocol=http%3A&loginIndex=http%3A%2F%2Fwww.xinshangmeng.com%2Fxs...&valcode=&_1594008442964

这里捕捉到了发送的请求 我们逐个查看 寻找登录的包



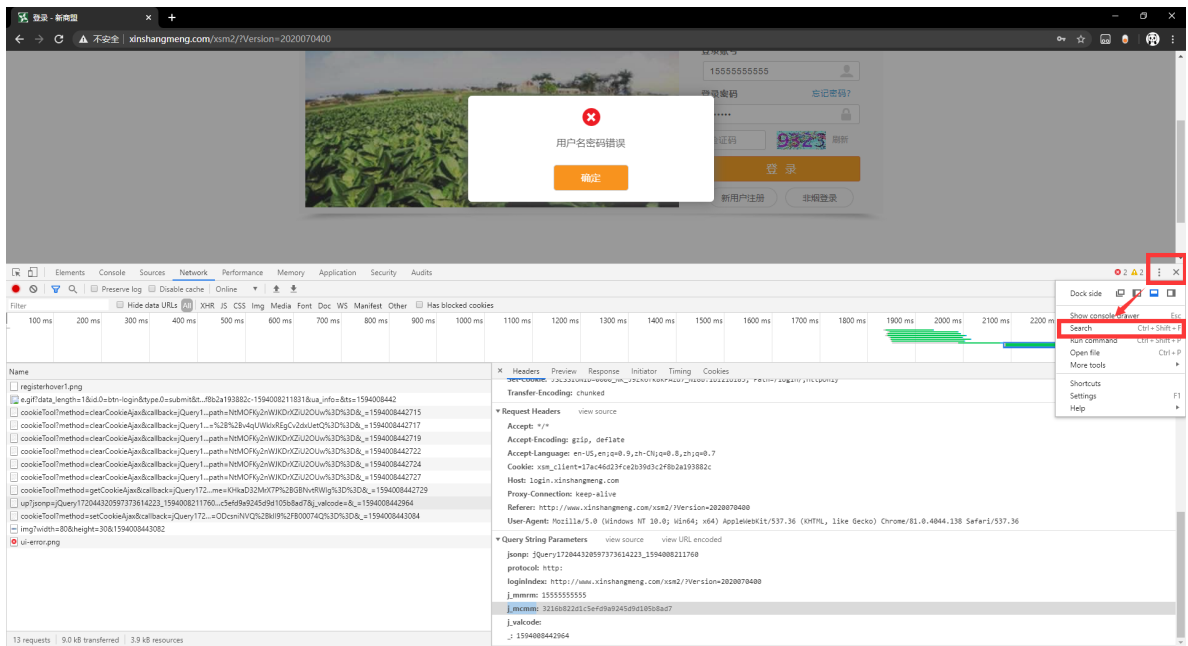
jsonp: jQuery172044320597373614223_1594008211760
protocol: http:
loginIndex: http://www.xinshangmeng.com/xsm2/?Version=2020070400
j_mmmr: 1555555555
j_mcmm: 3216b822d1c5efd9a9245d9d105b8ad7
j_valcode:
_: 1594008442964

经过查看 我们很容易看出 这个包是用来登录的包

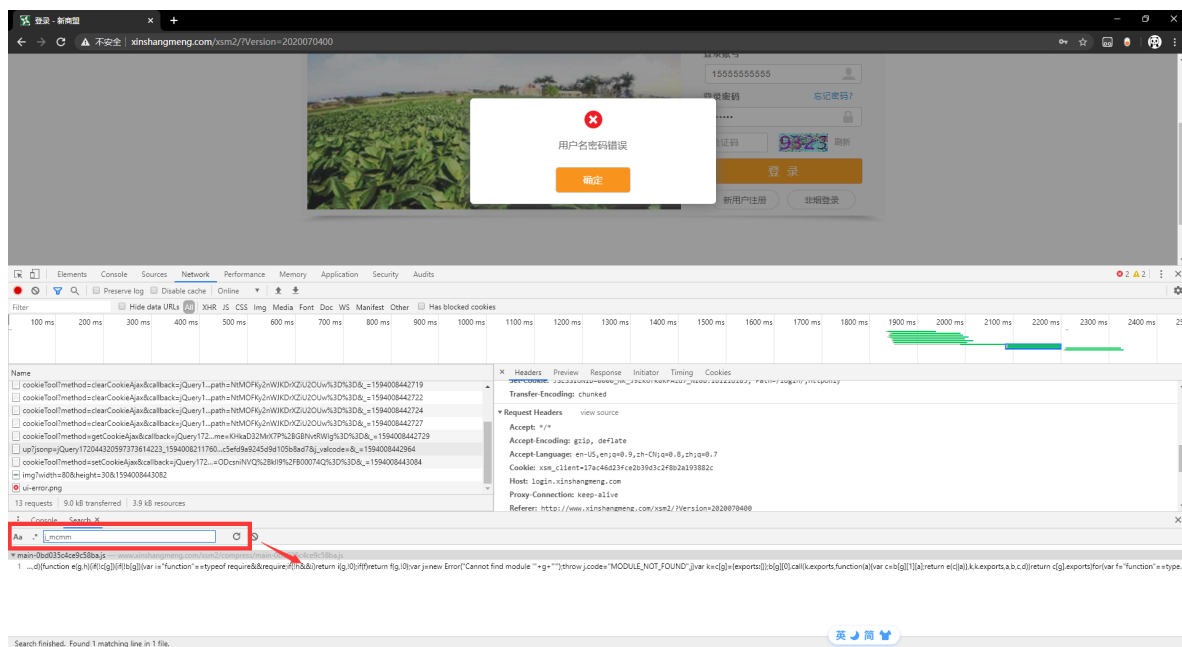
这里j_mmmr显然就是我们输入的账号

那么猜测一下 j_mcmm 便是我们的密码 不过我们输入的是123456 这里却是一串码 说明它背后进行了加密

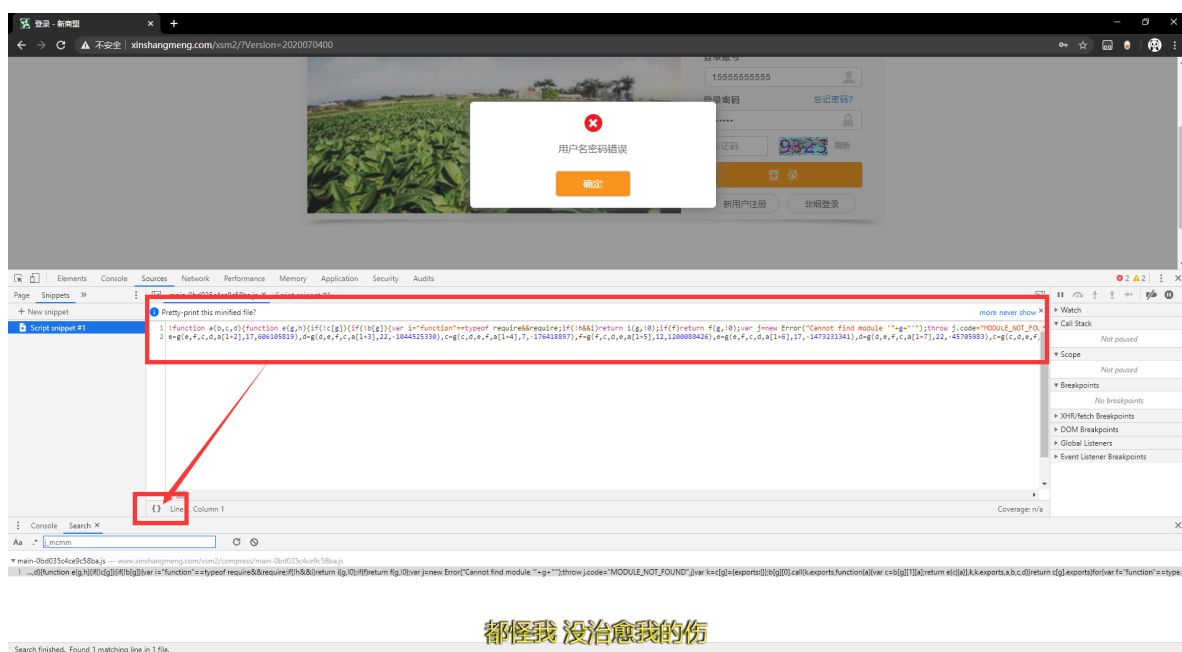
3.进行检索 查找加密方法



如图即可打开全局搜索框 接着我们搜索参数 j_mcmm



我们输入进行回车 搜索到一个 这个结果很理想 我们直接点进去

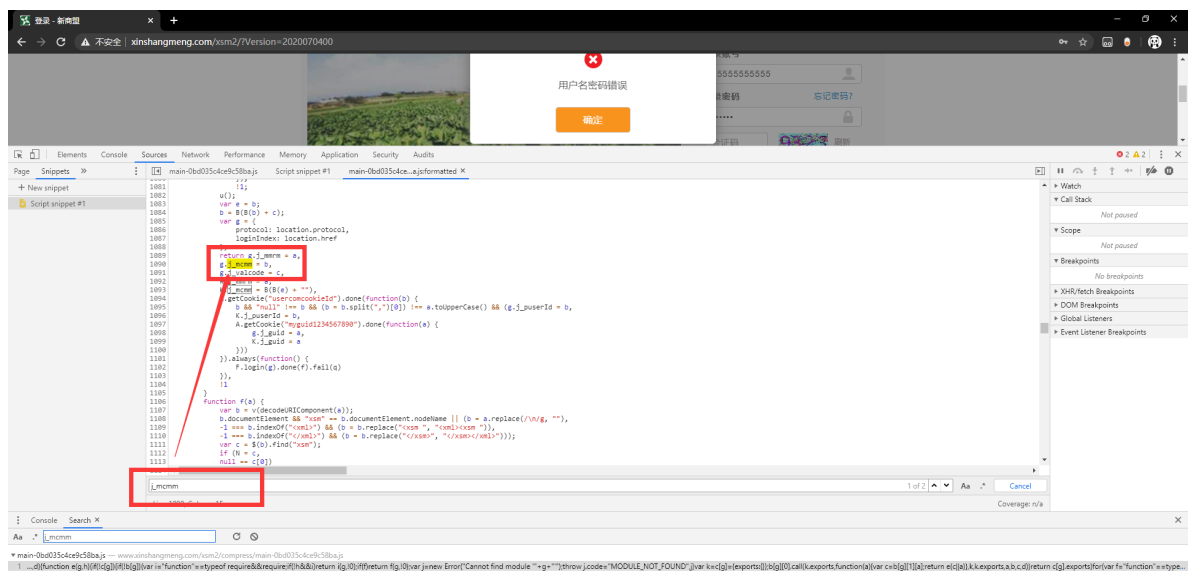


都怪我 没治愈我的伤

这里的代码被折叠了 我们点击{}便可以格式代码

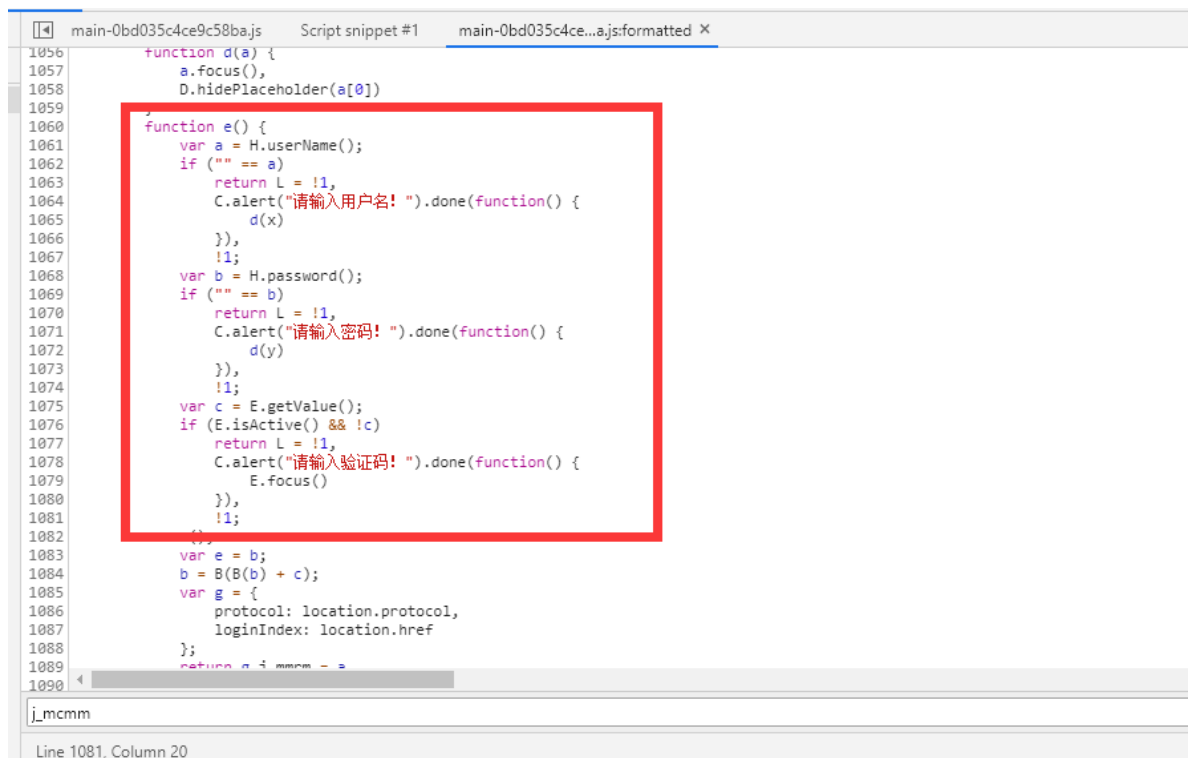
接着我们ctrl+F启动搜索 搜索刚才的 j_mcmmm 便可以定位到参数的位置

```
return g.j_mmmr = a,
    g.j_mcmmm = b,
    g.j_valcode = c,
    K.j_mmmr = a,
    K.j_mcmmm = B(B(e) + ""),
    A.getCookie("usercomcookieId").done(function(b) {
        b && "null" !== b && (b = b.split(",")[0]) !== a.toUpperCase()
    }) && (g.j_puserId = b,
        K.j_puserId = b,
        A.getCookie("myguid1234567890").done(function(a) {
            g.j_guid = a,
            K.j_guid = a
        })))
```



都怪我 没治愈我的伤

我们稍微的预览一下代码 简单的看下代码的逻辑



```
var a = H.userName();
if ("" == a)
    return L = !1,
    C.alert("请输入用户名!").done(function() {
        d(x)
    }),
    !1;
var b = H.password();
if ("" == b)
    return L = !1,
    C.alert("请输入密码!").done(function() {
        d(y)
    }),
    !1;
var c = E.getValue();
if (E.isActive() && !c)
    return L = !1,
    C.alert("请输入验证码!").done(function() {
        E.focus()
    }),
    !1;
var e = b;
b = B(B(b) + c);
var g = {
    protocol: location.protocol,
    loginIndex: location.href
};
return g + j_mcmn = e;
```

```

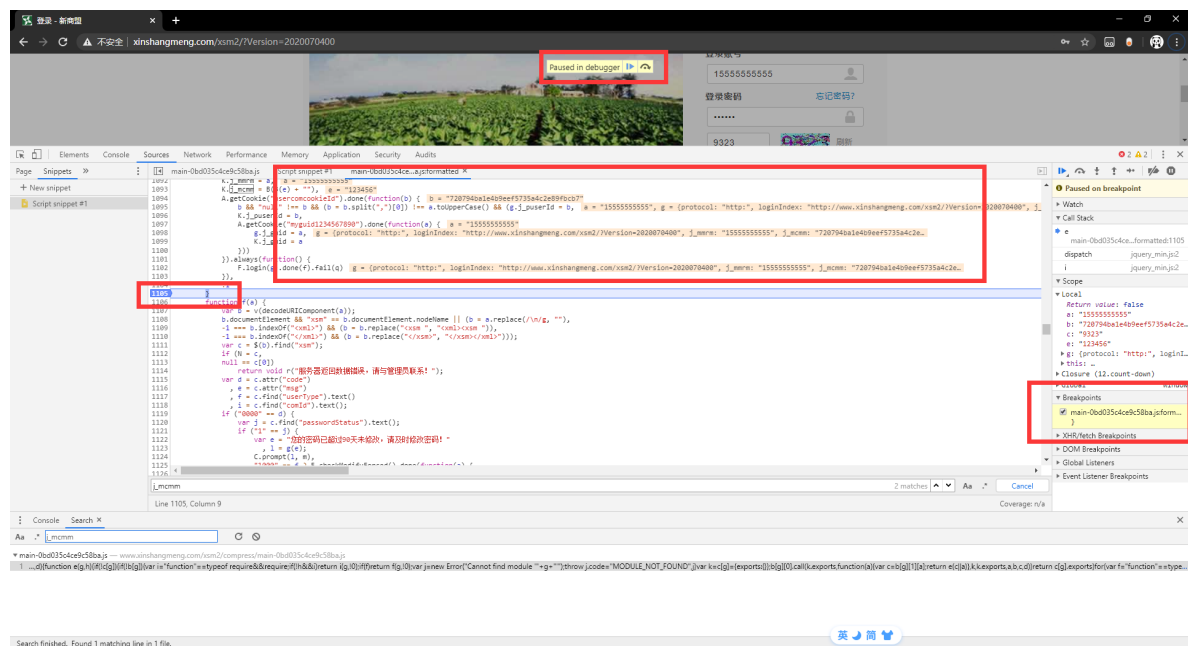
if (E.isActive() && !c)
    return L = !1,
    C.alert("请输入验证码! ").done(function() {
        E.focus()
    }),
    !1;
u();

```

这里是对账户密码验证码是否为空进行判断 所以加密应该在下面 我们在函数末尾打上一个断点（点击左侧的数字 就可以在这行下一个断点）



接着我们再登录一次 程序运行到这里便会停下来



这便是断下来了 同时我们可以看到很多执行过的代码的数据 右侧也有断点相关的信息

```

1082      u();
1083      var e = b; e = "123456", b = "720794ba1e4b9eef5735a4c2e89fbc7"
1084      b = B(B(b) + c); c = "9323"
1085      var g = { g = {protocol: "http:", loginIndex: "http://www.xinshangmeng.com/xsm2/?Version=2020070400", j_mmm: "1555555555", j_mcm: "720794ba1e4b9eef5735a4c2e89fbc7"}
1086      protocol: location.protocol,
1087      loginIndex: location.href
1088    };
1089    return g.j_mmm = a, g = {protocol: "http:", loginIndex: "http://www.xinshangmeng.com/xsm2/?Version=2020070400", j_mmm: "1555555555", j_mcm: "720794ba1e4b9eef5735a4c2e89fbc7"}
1090    g.j_mcm = b, b = "720794ba1e4b9eef5735a4c2e89fbc7"
1091    g.j_valcode = c, c = "9323"
1092    K.j_mcm = a, a = "1555555555"
1093    K.j_mcm = B(B(e) + ""), e = "123456"
1094    A.getCookie("usercomcookieId").done(function(b) { b = "720794ba1e4b9eef5735a4c2e89fbc7"
1095      b && "null" != b && (b = b.split(",")[0]) != a.toUpperCase() && (g.j_puserId = b, a = "1555555555", g = {protocol: "http:", loginIndex: "http://www.xinshangmeng.com/xsm2/?Version=2020070400",
1096      K.j_puserId = b,
1097      A.getCookie("myguid1234567890").done(function(a) { a = "1555555555"
1098      g.j_guid = a, g = {protocol: "http:", loginIndex: "http://www.xinshangmeng.com/xsm2/?Version=2020070400", j_mmm: "1555555555", j_mcm: "720794ba1e4b9eef5735a4c2e89fbc7"}
1099      K.j_guid = a
1100    })})
1101  }).always(function() {
1102    F.login(g).done(f).fail(q) g = {protocol: "http:", loginIndex: "http://www.xinshangmeng.com/xsm2/?Version=2020070400", j_mmm: "1555555555", j_mcm: "720794ba1e4b9eef5735a4c2e89fbc7"}
1103  }),
1104  !1
1105  }
1106  function f(a) {
1107    var b = v(decodeURIComponent(a));
1108    b.documentElement && "xsm" == b.documentElement.nodeName || (b = a.replace(/\n/g, ""));
1109    -1 == b.indexOf("<xsm>") && (b = b.replace("<xsm ", "<xsm1>xsm "));
1110    -1 == b.indexOf("<xsm1>") && (b = b.replace("<xsm1 ", "<xsm2>xsm1 "));
1111  }

```

观察我们发现 1093行 e是我们的密码 是明文的 但是到了1094行 已经成了密文 所以我们可以猜测

`K.j_mcm = B(B(e) + "")`,

这是我们的加密函数

选中 `B(B(e) + "")` 我们可以看到函数的执行结果:

```

1074      !1;
1075      var c = E.getValue(); c = "9323"
1076      if (E.isActive() && !c)
1077        return L = !1,
1078        C.alert("请输入验证码! ").done(function() {
1079          E.focus()
1080        }),
1081        !1;
1082      u();
1083      var e = b; e = "123456", b = "720794ba1e4b9eef5735a4c2e89fbc7"
1084      b = B(B(b) + c); c = "9323"
1085      var g = { g = {protocol: "http:", loginIndex: "http://www.xinshangmeng.com/xsm2/?Version=2020070400", j_mmm: "1555555555", j_mcm: "720794ba1e4b9eef5735a4c2e89fbc7"}
1086      protocol: location.protocol,
1087      loginIndex: location.href
1088    };
1089    return g.j_mmm = a, g = {protocol: "http:", loginIndex: "http://www.xinshangmeng.com/xsm2/?Version=2020070400", j_mmm: "1555555555", j_mcm: "720794ba1e4b9eef5735a4c2e89fbc7"}
1090    g.j_mcm = b, b = "720794ba1e4b9eef5735a4c2e89fbc7"
1091    g.j_valcode = "3216b822d1c5efd9a9245d9d105b8ad7"
1092    K.j_mmm = a, a = "1555555555"
1093    K.j_mcm = B(B(e) + ""), e = "123456"
1094    A.getCookie("usercomcookieId").done(function(b) { b = "720794ba1e4b9eef5735a4c2e89fbc7"
1095      b && "null" != b && (b = b.split(",")[0]) != a.toUpperCase() && (g.j_puserId = b, a = "1555555555", g = {protocol: "http:", loginIndex: "http://www.xinshangmeng.com/xsm2/?Version=2020070400",
1096      K.j_puserId = b,
1097      A.getCookie("myguid1234567890").done(function(a) { a = "1555555555"
1098      g.j_guid = a, g = {protocol: "http:", loginIndex: "http://www.xinshangmeng.com/xsm2/?Version=2020070400", j_mmm: "1555555555", j_mcm: "720794ba1e4b9eef5735a4c2e89fbc7"}
1099      K.j_guid = a
1100    })})
1101  }).always(function() {
1102    F.login(g).done(f).fail(q) g = {protocol: "http:", loginIndex: "http://www.xinshangmeng.com/xsm2/?Version=2020070400", j_mmm: "1555555555", j_mcm: "720794ba1e4b9eef5735a4c2e89fbc7"}
1103  }),
1104  !1
1105  }
1106  function f(a) {
1107    var b = v(decodeURIComponent(a));
1108    b.documentElement && "xsm" == b.documentElement.nodeName || (b = a.replace(/\n/g, ""));
1109    -1 == b.indexOf("<xsm>") && (b = b.replace("<xsm ", "<xsm1>xsm "));
1110    -1 == b.indexOf("<xsm1>") && (b = b.replace("<xsm1 ", "<xsm2>xsm1 "));
1111  }

```

这就是我们想要的结果 粗略的看一下 这里是 `B("123456")` 然后把结果又

`B(B("123456"))` 这样的思路

我们选 B 便可以点进去查看他的函数内容:


```
main-0bd035c4ce9c58ba.js  Script snippet #1  main-0bd035c4ce...a.js:formatted ✕
1621
1622     c.decrypt = function(a) {
1623         var b = f.parse(a)
1624         , c = f.stringify(b);
1625         return d.decrypt(c, h, {
1626             mode: g
1627         }).toString(e).toString()
1628     }
1629 }
1630 , {
1631     "crypto-js/aes": 1,
1632     "crypto-js/enc-base64": 4,
1633     "crypto-js/enc-utf8": 5,
1634     "crypto-js/mode-ecb": 9
1635 }],
1636 19: [function(a, b, c) {
1637     function d(a) {
1638         return n(e(o(m(a + "{1#2$3%4(5)6@7!poeeww$3%4(5)djjkkldss}")), 32))
1639     }
1640     function e(a, b) {
1641         for (var c = 1732584193, d = -271733879, e = -1732584194, f = 271733878, l = 0; l < a.length; l += 16) {
1642             var m = c
1643             , n = d
1644             , o = e
1645             , p = f;
1646             c = g(c, d, e, f, a[l + 0], 7, -680876936),
1647             f = g(f, c, d, e, a[l + 1], 12, -389564586),
1648             e = g(e, f, c, d, a[l + 2], 17, 606105819),
1649             d = g(d, e, f, c, a[l + 3], 22, -1044525330),
1650             c = g(c, d, e, f, a[l + 4], 7, -176418897),
1651             f = g(f, c, d, e, a[l + 5], 12, 120080426),
1652             e = g(e, f, c, d, a[l + 6], 17, -1473231341),
1653             d = g(d, e, f, c, a[l + 7], 22, -45705983),
1654
```

这就是它的加密逻辑 调用了一大堆的方法 一层一层 俄罗斯套娃

```
function d(a) {
    return n(e(o(m(a + "{1#2$3%4(5)6@7!poeeww$3%4(5)djjkkldss}")), 32))
}
```

选中 `m(a + "{1#2$3%4(5)6@7!poeeww$3%4(5)djjkkldss}")` 会出现运行结果 (注意不要框选错了)

其他函数同理 选中对应的函数 就可以看到运行的结果

```
19: [function(a, b, c) {
    function d(a) {
        return n(e(o(m(a + "{1#2$3%4(5)6@7!poeeww$3%4(5)djjkkldss}")), 32))
    }
    function e(a, b) {
        for (var c = 1732584193, d = -271733879, e = -1732584194, f = 271733878, l = 0; l < a.length; l += 16) {
            var m = c
            , n = d
            , o = e
            , p = f;
            c = g(c, d, e, f, a[l + 0], 7, -680876936),
            f = g(f, c, d, e, a[l + 1], 12, -389564586),
            e = g(e, f, c, d, a[l + 2], 17, 606105819),
            d = g(d, e, f, c, a[l + 3], 22, -1044525330),
            ...省略
```

这里看到19: [...]我们可以将这个函数整体拿下来

4.拿到方法 整理自己运行 扣方法 (注意拿到20:[]就行 不要多拿了)

```
19: [function(a, b, c) {
```



```

function d(a) {
    return n(e(o(m(a + "{1#2$3%4(5)6@7!poeeww$3%4(5)djjkkl dss}")), 32))
}
function e(a, b) {
    for (var c = 1732584193, d = -271733879, e = -1732584194, f =
271733878, l = 0; l < a.length; l += 16) {
        var m = c
            , n = d
            , o = e
            , p = f;
        c = g(c, d, e, f, a[l + 0], 7, -680876936),
        f = g(f, c, d, e, a[l + 1], 12, -389564586),
        e = g(e, f, c, d, a[l + 2], 17, 606105819),
        d = g(d, e, f, c, a[l + 3], 22, -1044525330),
        c = g(c, d, e, f, a[l + 4], 7, -176418897),
        f = g(f, c, d, e, a[l + 5], 12, 1200080426),
        e = g(e, f, c, d, a[l + 6], 17, -1473231341),
        d = g(d, e, f, c, a[l + 7], 22, -45705983),
        c = g(c, d, e, f, a[l + 8], 7, 1770035416),
        f = g(f, c, d, e, a[l + 9], 12, -1958414417),
        e = g(e, f, c, d, a[l + 10], 17, -42063),
        d = g(d, e, f, c, a[l + 11], 22, -1990404162),
        c = g(c, d, e, f, a[l + 12], 7, 1804603682),
        f = g(f, c, d, e, a[l + 13], 12, -40341101),
        e = g(e, f, c, d, a[l + 14], 17, -1502002290),
        d = g(d, e, f, c, a[l + 15], 22, 1236535329),
        c = h(c, d, e, f, a[l + 1], 5, -165796510),
        f = h(f, c, d, e, a[l + 6], 9, -1069501632),
        e = h(e, f, c, d, a[l + 11], 14, 643717713),
        d = h(d, e, f, c, a[l + 0], 20, -373897302),
        c = h(c, d, e, f, a[l + 5], 5, -701558691),
        f = h(f, c, d, e, a[l + 10], 9, 38016083),
        e = h(e, f, c, d, a[l + 15], 14, -660478335),
        d = h(d, e, f, c, a[l + 4], 20, -405537848),
        c = h(c, d, e, f, a[l + 9], 5, 568446438),
        f = h(f, c, d, e, a[l + 14], 9, -1019803690),
        e = h(e, f, c, d, a[l + 3], 14, -187363961),
        d = h(d, e, f, c, a[l + 8], 20, 1163531501),
        c = h(c, d, e, f, a[l + 13], 5, -1444681467),
        f = h(f, c, d, e, a[l + 2], 9, -51403784),
        e = h(e, f, c, d, a[l + 7], 14, 1735328473),
        d = h(d, e, f, c, a[l + 12], 20, -1926607734),
        c = i(c, d, e, f, a[l + 5], 4, -378558),
        f = i(f, c, d, e, a[l + 8], 11, -2022574463),
        e = i(e, f, c, d, a[l + 11], 16, 1839030562),
        d = i(d, e, f, c, a[l + 14], 23, -35309556),
        c = i(c, d, e, f, a[l + 1], 4, -1530992060),
        f = i(f, c, d, e, a[l + 4], 11, 1272893353),
        e = i(e, f, c, d, a[l + 7], 16, -155497632),
        d = i(d, e, f, c, a[l + 10], 23, -1094730640),
        c = i(c, d, e, f, a[l + 13], 4, 681279174),
        f = i(f, c, d, e, a[l + 0], 11, -358537222),
        e = i(e, f, c, d, a[l + 3], 16, -722521979),
        d = i(d, e, f, c, a[l + 6], 23, 76029189),
        c = i(c, d, e, f, a[l + 9], 4, -640364487),
        f = i(f, c, d, e, a[l + 12], 11, -421815835),
        e = i(e, f, c, d, a[l + 15], 16, 530742520),
        d = i(d, e, f, c, a[l + 2], 23, -995338651),

```

```

        c = j(c, d, e, f, a[l + 0], 6, -198630844),
        f = j(f, c, d, e, a[l + 7], 10, 1126891415),
        e = j(e, f, c, d, a[l + 14], 15, -1416354905),
        d = j(d, e, f, c, a[l + 5], 21, -57434055),
        c = j(c, d, e, f, a[l + 12], 6, 1700485571),
        f = j(f, c, d, e, a[l + 3], 10, -1894986606),
        e = j(e, f, c, d, a[l + 10], 15, -1051523),
        d = j(d, e, f, c, a[l + 1], 21, -2054922799),
        c = j(c, d, e, f, a[l + 8], 6, 1873313359),
        f = j(f, c, d, e, a[l + 15], 10, -30611744),
        e = j(e, f, c, d, a[l + 6], 15, -1560198380),
        d = j(d, e, f, c, a[l + 13], 21, 1309151649),
        c = j(c, d, e, f, a[l + 4], 6, -145523070),
        f = j(f, c, d, e, a[l + 11], 10, -1120210379),
        e = j(e, f, c, d, a[l + 2], 15, 718787259),
        d = j(d, e, f, c, a[l + 9], 21, -343485551),
        c = k(c, m),
        d = k(d, n),
        e = k(e, o),
        f = k(f, p)
    }
    return new Array(c,d,e,f)
}
function f(a, b, c, d, e, f) {
    return k(l(k(k(b, a), k(d, f)), e), c)
}
function g(a, b, c, d, e, g, h) {
    return f(b & c | ~b & d, a, b, e, g, h)
}
function h(a, b, c, d, e, g, h) {
    return f(b & d | c & ~d, a, b, e, g, h)
}
function i(a, b, c, d, e, g, h) {
    return f(b ^ c ^ d, a, b, e, g, h)
}
function j(a, b, c, d, e, g, h) {
    return f(c ^ (b | ~d), a, b, e, g, h)
}
function k(a, b) {
    var c = (65535 & a) + (65535 & b);
    return (a >> 16) + (b >> 16) + (c >> 16) << 16 | 65535 & c
}
function l(a, b) {
    return a << b | a >>> 32 - b
}
function m(a) {
    for (var b = a.length, c = new Array(b), d = 0; d < b; d++) {
        var e = a.charCodeAt(d);
        c[d] = 255 & e
    }
    return c
}
function n(a) {
    for (var b = "0123456789abcdef", c = "", d = 0; d < 4 * a.length;
d++)
        c += b.charAt(a[d >> 2] >> d % 4 * 8 + 4 & 15) + b.charAt(a[d >>
2] >> d % 4 * 8 & 15);
    return c
}

```

```

    }
    function o(a) {
        for (var b = 1 + (a.length + 8 >> 6), c = new Array(16 * b), d = 0;
d < 16 * b; d++)
            c[d] = 0;
        for (var e = 0; e < a.length; e++)
            c[e >> 2] |= (255 & a[e]) << e % 4 * 8;
        return c[e >> 2] |= 128 << e % 4 * 8,
c[16 * b - 2] = 8 * a.length,
c
    }
    c.hex_md5 = d
}
, {}],

```

这里我们想把这个方法能够为我们所用 但是分析它的逻辑 再用别的语言实现 有点不太现实 所以我们按照下面的方法 直接将它的代码跑起来 为我们服务

首先 我们观察 这个19里有两个部分 一个function一个{} 所以我们只要留下function主体就好 去掉19: [] 与{} 结果如下:

```

function(a, b, c) {
    function d(a) {
        return n(e(o(m(a + "{1#2$3%4(5)6@7!poeeww$3%4(5)djjkkldss}")), 32))
    }
    function e(a, b) {
        for (var c = 1732584193, d = -271733879, e = -1732584194, f =
271733878, l = 0; l < a.length; l += 16) {
            var m = c
            , n = d
            , o = e
            , p = f;
            c = g(c, d, e, f, a[l + 0], 7, -680876936),
            f = g(f, c, d, e, a[l + 1], 12, -389564586),
            e = g(e, f, c, d, a[l + 2], 17, 606105819),
            d = g(d, e, f, c, a[l + 3], 22, -1044525330),
            c = g(c, d, e, f, a[l + 4], 7, -176418897),
            f = g(f, c, d, e, a[l + 5], 12, 1200080426),
            e = g(e, f, c, d, a[l + 6], 17, -1473231341),
            d = g(d, e, f, c, a[l + 7], 22, -45705983),
            c = g(c, d, e, f, a[l + 8], 7, 1770035416),
            f = g(f, c, d, e, a[l + 9], 12, -1958414417),
            e = g(e, f, c, d, a[l + 10], 17, -42063),
            d = g(d, e, f, c, a[l + 11], 22, -1990404162),
            c = g(c, d, e, f, a[l + 12], 7, 1804603682),
            f = g(f, c, d, e, a[l + 13], 12, -40341101),
            e = g(e, f, c, d, a[l + 14], 17, -1502002290),
            d = g(d, e, f, c, a[l + 15], 22, 1236535329),
            c = h(c, d, e, f, a[l + 1], 5, -165796510),
            f = h(f, c, d, e, a[l + 6], 9, -1069501632),
            e = h(e, f, c, d, a[l + 11], 14, 643717713),
            d = h(d, e, f, c, a[l + 0], 20, -373897302),
            c = h(c, d, e, f, a[l + 5], 5, -701558691),
            f = h(f, c, d, e, a[l + 10], 9, 38016083),
            e = h(e, f, c, d, a[l + 15], 14, -660478335),
            d = h(d, e, f, c, a[l + 4], 20, -405537848),
            c = h(c, d, e, f, a[l + 9], 5, 568446438),

```

```

        f = h(f, c, d, e, a[l + 14], 9, -1019803690),
        e = h(e, f, c, d, a[l + 3], 14, -187363961),
        d = h(d, e, f, c, a[l + 8], 20, 1163531501),
        c = h(c, d, e, f, a[l + 13], 5, -1444681467),
        f = h(f, c, d, e, a[l + 2], 9, -51403784),
        e = h(e, f, c, d, a[l + 7], 14, 1735328473),
        d = h(d, e, f, c, a[l + 12], 20, -1926607734),
        c = i(c, d, e, f, a[l + 5], 4, -378558),
        f = i(f, c, d, e, a[l + 8], 11, -2022574463),
        e = i(e, f, c, d, a[l + 11], 16, 1839030562),
        d = i(d, e, f, c, a[l + 14], 23, -35309556),
        c = i(c, d, e, f, a[l + 1], 4, -1530992060),
        f = i(f, c, d, e, a[l + 4], 11, 1272893353),
        e = i(e, f, c, d, a[l + 7], 16, -155497632),
        d = i(d, e, f, c, a[l + 10], 23, -1094730640),
        c = i(c, d, e, f, a[l + 13], 4, 681279174),
        f = i(f, c, d, e, a[l + 0], 11, -358537222),
        e = i(e, f, c, d, a[l + 3], 16, -722521979),
        d = i(d, e, f, c, a[l + 6], 23, 76029189),
        c = i(c, d, e, f, a[l + 9], 4, -640364487),
        f = i(f, c, d, e, a[l + 12], 11, -421815835),
        e = i(e, f, c, d, a[l + 15], 16, 530742520),
        d = i(d, e, f, c, a[l + 2], 23, -995338651),
        c = j(c, d, e, f, a[l + 0], 6, -198630844),
        f = j(f, c, d, e, a[l + 7], 10, 1126891415),
        e = j(e, f, c, d, a[l + 14], 15, -1416354905),
        d = j(d, e, f, c, a[l + 5], 21, -57434055),
        c = j(c, d, e, f, a[l + 12], 6, 1700485571),
        f = j(f, c, d, e, a[l + 3], 10, -1894986606),
        e = j(e, f, c, d, a[l + 10], 15, -1051523),
        d = j(d, e, f, c, a[l + 1], 21, -2054922799),
        c = j(c, d, e, f, a[l + 8], 6, 1873313359),
        f = j(f, c, d, e, a[l + 15], 10, -30611744),
        e = j(e, f, c, d, a[l + 6], 15, -1560198380),
        d = j(d, e, f, c, a[l + 13], 21, 1309151649),
        c = j(c, d, e, f, a[l + 4], 6, -145523070),
        f = j(f, c, d, e, a[l + 11], 10, -1120210379),
        e = j(e, f, c, d, a[l + 2], 15, 718787259),
        d = j(d, e, f, c, a[l + 9], 21, -343485551),
        c = k(c, m),
        d = k(d, n),
        e = k(e, o),
        f = k(f, p)
    }
    return new Array(c,d,e,f)
}
function f(a, b, c, d, e, f) {
    return k(1(k(k(b, a), k(d, f)), e), c)
}
function g(a, b, c, d, e, g, h) {
    return f(b & c | ~b & d, a, b, e, g, h)
}
function h(a, b, c, d, e, g, h) {
    return f(b & d | c & ~d, a, b, e, g, h)
}
function i(a, b, c, d, e, g, h) {
    return f(b ^ c ^ d, a, b, e, g, h)
}

```

```

function j(a, b, c, d, e, g, h) {
    return f(c ^ (b | ~d), a, b, e, g, h)
}
function k(a, b) {
    var c = (65535 & a) + (65535 & b);
    return (a >> 16) + (b >> 16) + (c >> 16) << 16 | 65535 & c
}
function l(a, b) {
    return a << b | a >>> 32 - b
}
function m(a) {
    for (var b = a.length, c = new Array(b), d = 0; d < b; d++) {
        var e = a.charCodeAt(d);
        c[d] = 255 & e
    }
    return c
}
function n(a) {
    for (var b = "0123456789abcdef", c = "", d = 0; d < 4 * a.length;
d++)
        c += b.charAt(a[d >> 2] >> d % 4 * 8 + 4 & 15) + b.charAt(a[d >>
2] >> d % 4 * 8 & 15);
    return c
}
function o(a) {
    for (var b = 1 + (a.length + 8 >> 6), c = new Array(16 * b), d = 0;
d < 16 * b; d++)
        c[d] = 0;
    for (var e = 0; e < a.length; e++)
        c[e >> 2] |= (255 & a[e]) << e % 4 * 8;
    return c[e >> 2] | 128 << e % 4 * 8,
        c[16 * b - 2] = 8 * a.length,
        c
}
c.hex_md5 = d
}

```

接着让这个函数变为自执行函数（可以百度JS自执行的几种方式）改完的模板如下

```

//定义一个全局变量 将用到的加密方法导出来
var get_code_;
//这里为自执行函数 !function(){}()
!function(a) {
    //假设b是我们用到的加密方法
    function b() {

    }
    ...
    //在最后 将加密方法导出来
    get_code_ = b;
}()

```

这样改完之后 我们执行发现 `c.hex_md5 = d` 这行报错 我们看这行 其实就是通过 `c.hex_md5` 把 `d` 方法给导出了

所以这行我们可以注释掉 用我们的 `get_code_` 来导出就好了

5.改完代码如下:

```
var get_code_;
!function(a, b, c) {
    function d(a) {
        return n(e(o(m(a + "{1#2$3%4(5)6@7!poeeww$3%4(5)djjkkldss}")), 32))
    }
    function e(a, b) {
        for (var c = 1732584193, d = -271733879, e = -1732584194, f =
271733878, l = 0; l < a.length; l += 16) {
            var m = c
                , n = d
                , o = e
                , p = f;
            c = g(c, d, e, f, a[l + 0], 7, -680876936),
            f = g(f, c, d, e, a[l + 1], 12, -389564586),
            e = g(e, f, c, d, a[l + 2], 17, 606105819),
            d = g(d, e, f, c, a[l + 3], 22, -1044525330),
            c = g(c, d, e, f, a[l + 4], 7, -176418897),
            f = g(f, c, d, e, a[l + 5], 12, 1200080426),
            e = g(e, f, c, d, a[l + 6], 17, -1473231341),
            d = g(d, e, f, c, a[l + 7], 22, -45705983),
            c = g(c, d, e, f, a[l + 8], 7, 1770035416),
            f = g(f, c, d, e, a[l + 9], 12, -1958414417),
            e = g(e, f, c, d, a[l + 10], 17, -42063),
            d = g(d, e, f, c, a[l + 11], 22, -1990404162),
            c = g(c, d, e, f, a[l + 12], 7, 1804603682),
            f = g(f, c, d, e, a[l + 13], 12, -40341101),
            e = g(e, f, c, d, a[l + 14], 17, -1502002290),
            d = g(d, e, f, c, a[l + 15], 22, 1236535329),
            c = h(c, d, e, f, a[l + 1], 5, -165796510),
            f = h(f, c, d, e, a[l + 6], 9, -1069501632),
            e = h(e, f, c, d, a[l + 11], 14, 643717713),
            d = h(d, e, f, c, a[l + 0], 20, -373897302),
            c = h(c, d, e, f, a[l + 5], 5, -701558691),
            f = h(f, c, d, e, a[l + 10], 9, 38016083),
            e = h(e, f, c, d, a[l + 15], 14, -660478335),
            d = h(d, e, f, c, a[l + 4], 20, -405537848),
            c = h(c, d, e, f, a[l + 9], 5, 568446438),
            f = h(f, c, d, e, a[l + 14], 9, -1019803690),
            e = h(e, f, c, d, a[l + 3], 14, -187363961),
            d = h(d, e, f, c, a[l + 8], 20, 1163531501),
            c = h(c, d, e, f, a[l + 13], 5, -1444681467),
            f = h(f, c, d, e, a[l + 2], 9, -51403784),
            e = h(e, f, c, d, a[l + 7], 14, 1735328473),
            d = h(d, e, f, c, a[l + 12], 20, -1926607734),
            c = i(c, d, e, f, a[l + 5], 4, -378558),
            f = i(f, c, d, e, a[l + 8], 11, -2022574463),
            e = i(e, f, c, d, a[l + 11], 16, 1839030562),
            d = i(d, e, f, c, a[l + 14], 23, -35309556),
            c = i(c, d, e, f, a[l + 1], 4, -1530992060),
            f = i(f, c, d, e, a[l + 4], 11, 1272893353),
            e = i(e, f, c, d, a[l + 7], 16, -155497632),
            d = i(d, e, f, c, a[l + 10], 23, -1094730640),
            c = i(c, d, e, f, a[l + 13], 4, 681279174),
            f = i(f, c, d, e, a[l + 0], 11, -358537222),
            e = i(e, f, c, d, a[l + 3], 16, -722521979),
```

```

        d = i(d, e, f, c, a[l + 6], 23, 76029189),
        c = i(c, d, e, f, a[l + 9], 4, -640364487),
        f = i(f, c, d, e, a[l + 12], 11, -421815835),
        e = i(e, f, c, d, a[l + 15], 16, 530742520),
        d = i(d, e, f, c, a[l + 2], 23, -995338651),
        c = j(c, d, e, f, a[l + 0], 6, -198630844),
        f = j(f, c, d, e, a[l + 7], 10, 1126891415),
        e = j(e, f, c, d, a[l + 14], 15, -1416354905),
        d = j(d, e, f, c, a[l + 5], 21, -57434055),
        c = j(c, d, e, f, a[l + 12], 6, 1700485571),
        f = j(f, c, d, e, a[l + 3], 10, -1894986606),
        e = j(e, f, c, d, a[l + 10], 15, -1051523),
        d = j(d, e, f, c, a[l + 1], 21, -2054922799),
        c = j(c, d, e, f, a[l + 8], 6, 1873313359),
        f = j(f, c, d, e, a[l + 15], 10, -30611744),
        e = j(e, f, c, d, a[l + 6], 15, -1560198380),
        d = j(d, e, f, c, a[l + 13], 21, 1309151649),
        c = j(c, d, e, f, a[l + 4], 6, -145523070),
        f = j(f, c, d, e, a[l + 11], 10, -1120210379),
        e = j(e, f, c, d, a[l + 2], 15, 718787259),
        d = j(d, e, f, c, a[l + 9], 21, -343485551),
        c = k(c, m),
        d = k(d, n),
        e = k(e, o),
        f = k(f, p)
    }
    return new Array(c,d,e,f)
}
function f(a, b, c, d, e, f) {
    return k(l(k(k(b, a), k(d, f)), e), c)
}
function g(a, b, c, d, e, g, h) {
    return f(b & c | ~b & d, a, b, e, g, h)
}
function h(a, b, c, d, e, g, h) {
    return f(b & d | c & ~d, a, b, e, g, h)
}
function i(a, b, c, d, e, g, h) {
    return f(b ^ c ^ d, a, b, e, g, h)
}
function j(a, b, c, d, e, g, h) {
    return f(c ^ (b | ~d), a, b, e, g, h)
}
function k(a, b) {
    var c = (65535 & a) + (65535 & b);
    return (a >> 16) + (b >> 16) + (c >> 16) << 16 | 65535 & c
}
function l(a, b) {
    return a << b | a >>> 32 - b
}
function m(a) {
    for (var b = a.length, c = new Array(b), d = 0; d < b; d++) {
        var e = a.charCodeAt(d);
        c[d] = 255 & e
    }
    return c
}
function n(a) {

```



```

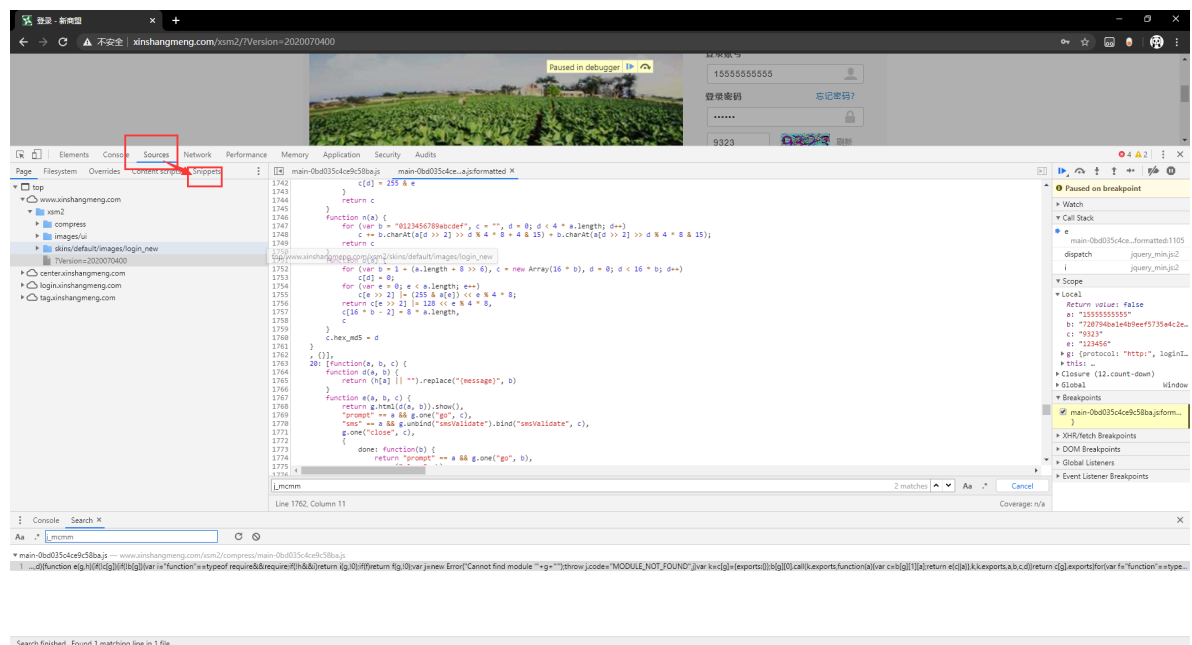
        for (var b = "0123456789abcdef", c = "", d = 0; d < 4 * a.length; d++)
            c += b.charAt(a[d >> 2] >> d % 4 * 8 + 4 & 15) + b.charAt(a[d >> 2] >> d % 4 * 8 & 15);
        return c
    }
    function o(a) {
        for (var b = 1 + (a.length + 8 >> 6), c = new Array(16 * b), d = 0; d < 16 * b; d++)
            c[d] = 0;
        for (var e = 0; e < a.length; e++)
            c[e >> 2] |= (255 & a[e]) << e % 4 * 8;
        return c[e >> 2] |= 128 << e % 4 * 8,
            c[16 * b - 2] = 8 * a.length,
            c
    }
    //c.hex_md5 = d
    get_code_ = d;
}()

```

接着我们运行我们的代码

这里有几种方式

1. nodejs 自己搭建node服务 然后运行返回结果
2. console 直接将刚才的内容 粘贴到console里回车（代码量较大的时候 可能会卡顿一点）
3. 调试工具 下载一个调试工具进行调试
4. chrome开发工具（这次我们先用这个）



打开 Snippets 面板 点击 New Snippets 创建一个新的脚本 将内容粘贴进去 接着 Ctrl + Enter 进行运行 或者如下点击运行

