## RETROTI 100 What is the plaintext password?

Load into Ghidra and open up strings.

```
ds "putchar"
                                                              "putchar"
                                                                                                               string
ds "popen"
                                                              "popen"
                                                                                                               string
                                                              "printf"
    ds "printf"
                                                                                                               string
ds "fgetc"
                                                              "fgetc"
                                                                                                               string
    ds "pclose"
                                                              "pclose"
  ds "__libc_start_main"
                                                               __libc_start_main"
                                                                                                               string
   ds "__gmon_start__"
                                                              "__gmon_start__"
                                                                                                               string
ds "GLIBC_2.7"
                                                              "GLIBC_2.7"
                                                                                                               string
                                                              "GLIBC_2,2,5"
    ds "GLIBC_2.2.5"
                                                                                                               string
    ds "\n Enter password:"
                                                              "\n Enter password:"
                                                                                                               string
o6 ds "Flag 1 Correct pasword"
                                                              "Flag 1 Correct pasword"
                                                                                                               string
                                                              "Wrong password.. try again!"
                                                                                                               string
4... ds "Wrong password.. try again!"
    ds "netstat"
                                                                                                               string
... ds "Flag 2: What command line tool was ran?"
                                                              "Flag 2: What command line tool was ran?"
                                                                                                               string
j... ds "Flag 2 Go to location 004008eb in Ghidra. ...
                                                             "Flag 2 Go to location 004008eb in Ghidra. What com...
                                                                                                               string
```

Looking at the main code we see the following:

```
undefined8 main(void)
{
  int iVar1;
  undefined8 uVar2;
  int local_20;
  char local_19;
  FILE *local_18;
  int local_c;

local_c = 10;
  printf("\n Enter password:");
  __isoc99_scanf(&DAT_004008b3,&local_20);
  if (local_20 == 0x13190) {
    printf("Flag 1 Correct pasword");
    local_c = 0;
```

We see that local\_20 is an int and if it = 0x13190 then we get in, 0x13190 in decimal is: 78224

Flag: 78224

# RETROIT 2 50 What was the hex value of the password?

How we found the password: 0x13190

Flag: 0x13190

# RETROIT 3 80 At what memory location is the password being compared (CMP)?

```
ff ff
00400741 8b 45 e8
                  MOV
                               EAX, dword ptr [RBP + local_20]
00400744 3d 90 31 CMP
                               EAX,0x13190
       01 00
00400749 75 35
                               LAB_00400780
                     JNZ
0040074b bf b6 08
                   MOV
                               EDI=>s_Flag_1_Correct_pasword_004008b6 ,s_Flag... = "Flag 1 Co1
       40 00
00400750 b8 00 00
                   MOV
                               EAX,0x0
```

Flag: 0x00400744

### REtroll 4

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What network command was found at memory location 004008eb?

#### s\_netstat\_004008eb

004008eb 6e 65 74 ds "netstat" 73 74 61 74 00 004008f3 00 ?? 00h

Flag: netstat