Problems

Points: 5206

Discord 1 points

Misc - Solved (693 solves)

Written by **soup**

Join the Discord chat! Maybe if you use it enough, you'll find the flag.

Hint | Already solved! | View Solves (/chals/solves/69)

The link to joining the Discord is on our Updates page ;) Make sure you read the info channel.

Intro: Hello, world! 10 points

Intro - Solved (1459 solves)

Written by **michael**

Using your favorite language of choice, print `Hello, world!` to the output.

- For Python, consider the `print` function.
- For Java, consider `System.out.println`.
- For CXX, consider including `stdio.h` and using the `printf` function.

Hint | View Solves (/chals/solves/65)

If you're not sure how to do this, try searching Google for how to make "Hello world!" programs in your language of choice.

Intro: Linux 10 points

Intro - Solved (1482 solves)

Written by **michael**

Log into the shell server! You can do this in your browser by clicking on the Shell server link in the dropdown in the top right corner, or using an SSH client by following the directions on that page.

Once you've logged in, you'll be in your *home directory*. We've hidden something there! Try to find it. :)

Hint | Already solved! | View Solves (/chals/solves/66)

The Oldest Trick in the Book 10 points

Intro - Solved (1704 solves)

Written by **ztaylor54**

This is literally one of oldest tricks in the book. To be precise, from the year AD 56.

Crack me. `jfxdhyk{b3qh0r3_70_345dh7k_5k5549}`

Hint | Already solved! | View Solves (/chals/solves/91)

Et tu, Brute?

Intro: Web 10 points

Intro - Solved (1944 solves)

Written by **michael**

The web goes well beyond the surface of the browser! Warm up your web-sleuthing skills with this challenge by finding the hidden flag on this page (/chals/autogen/92/index.html)!

Hint | Already solved! | View Solves (/chals/solves/92)

Not sure where to look? Try looking up 'source code', specifically related to web pages.

Soupreme Encoder 20 points

Cryptography - Solved (1453 solves)

Written by **soup**

Decode this `68657869745f6d6174655f3636396635303163313739653430626162313435`

Hint | Already solved! | View Solves (/chals/solves/81)

It's encoded!

Intro: Netcat 20 points

Intro - Solved (1366 solves)

Written by **michael**

I've got a little flag for you! Connect to `c1.easyctf.com:12481` to get it, but you can't use your browser!

(Don't know how to connect? Look up TCP clients like Netcat. Hint: the Shell server has Netcat installed already!)

Here's your player key: `874002350` . Several challenges might ask you for one, so you can get a unique flag!

Hint | Already solved! | View Solves (/chals/solves/87)

Intro: Hashing 20 points

Miscellaneous - Solved (796 solves)

Written by **gengkev**

Cryptographic hashes are pretty cool! Take the SHA-512 hash of this file (/chals/autogen/98/image.png), and submit it as your flag.

Hint | Already solved! | View Solves (/chals/solves/98)

Try searching the web to find out what SHA-512 is.

Programming: Exclusive 20 points

Programming - Solved (565 solves)

Written by **michael**

Given two integers `a` and `b`, return `a` xor `b`. Remember, the xor operator is a bitwise operator that's usually represented by the `^` character.

For example, if your input was `5 7`, then you should print `2`.

Hint | View Solves (/chals/solves/103)

Haystack 30 points

Forensics - Solved (1779 solves)

Written by **sso999**

There's a flag hidden in this haystack (/chals/autogen/75/haystack.txt).

Hint | Already solved! | View Solves (/chals/solves/75)

Look At Flag 30 points

Forensics - Solved (1664 solves)

Written by **soup**

What is the flag? flag (https://cdn.easyctf.com/4680b45d33184b3e3ad99338907d1fe7dfec8ddd4b43ac71da69154ce9a6035c_flag.txt)

Hint | Already solved! | View Solves (/chals/solves/78)

What is this file?

EzSteg 30 points

Forensics - Solved (1306 solves)

Written by **soup**

There appears to be a message beyond what you can see in soupculents.jpg (https://cdn.easyctf.com/e9360fa30ce8226e08ccb4c270f95454788836cb9cba2f1922b0a3a8c7346b85_soupculents.jpg).

Hint | Already solved! | View Solves (/chals/solves/82)

The description is a hint.

Intro: Reverse Engineering 30 points

Intro - Solved (537 solves)

Written by **michael**

What does this Python program (/chals/autogen/89/mystery.py) do? And more specifically, what input would give this output?

```
6528c39d4b4f03c38a5703c3b90710c39bc2ad45c293c2a3c2b17fc3a0c28343c3bc5c4110c3a3c2bf
```

Hint | Already solved! | View Solves (/chals/solves/89)

Try plugging in some values and working through it yourself.

Programming: Taking Input 30 points

Programming - Solved (722 solves)

Written by **michael**

OK, OK, you got Hello, world down, but can you greet specific people?

You'll be given the input of a certain name. Please greet that person using the same format. For example, if the given input is `Michael`, print `Hello, Michael!`.

- For Python, consider the `input()` function.
- For Java, consider `System.in`.
- For C, consider including `stdio.h` and reading input using `read`.
- For C++, consider including `iostream` and reading input using `cin`.

Hint | View Solves (/chals/solves/99)

Programming: Over and Over 30 points

Programming - Solved (599 solves)

Written by **michael**

over and over and over and over and over and ...

Given a number `N`, print the string "over [and over]" such that the string contains `N` "over"s. There should *not* be newlines in the string.

For example:

- For `N` = 1, print "over".
- For `N` = 5, print "over and over and over and over and over".

- For Python, consider using `for` and `range`.
- For Java/CXX, consider using a `for` loop.

Try doing it with `while` too for practice!

Hint | View Solves (/chals/solves/100)

Programming: Teaching Old Tricks New Dogs 40 points

Programming - Solved (418 solves)

Written by **michael**

You can decode a Caesar cipher, but can you write a program to decode a Caesar cipher?

Your program will be given 2 lines of input, and your program needs to output the original message.

- First line contains `N`, an integer representing how much the key was shifted by. `1 <= N <= 26`
- Second line contains the ciphertext, a string consisting of lowercase letters and spaces.

For example:

```
6
o rubk kgyeizl
```

You should print

```
i love easyctf
```

Hint | View Solves (/chals/solves/112)

hexedit 50 points

Reverse Engineering - Solved (1453 solves)

Written by **r3ndom**

Can you find the flag in this file (/chals/autogen/62/hexedit)?

Hint | Already solved! | View Solves (/chals/solves/62)

Substitute 50 points

Cryptography - Solved (1271 solves)

Written by **soup**

Nobody can guess this flag! msg.txt
(https://cdn.easyctf.com/0319d3ca4ab453b77c4bccd017185596583e20c0657bbd9ae45dab364045b4b5_msg.txt)

Hint | Already solved! | View Solves (/chals/solves/85)

Look at the title.

Markov's Bees 50 points — Linux - Solved (1001 solves)

Written by **ztaylor54**

Head over to the shell and see if you can find the flag at `/problems/markovs_bees/` !

Hint | Already solved! | View Solves (/chals/solves/88)

Don't do this by hand!

xor 50 points — Cryptography - Solved (691 solves)

Written by **sso999**

A flag has been encrypted using single-byte xor. Can you decrypt it? File (/chals/autogen/90/xor.txt).

Hint | Already solved! | View Solves (/chals/solves/90)

Programming: Subset Counting 55 points — Programming - Solved (147 solves)

Written by **blockingthesky**

Given a set of numbers, print out how many non-empty subsets sum to a given integer.

Input Format

The first line contains two integers `N` and `S`. The second line contains `N` space-separated integers `a_1, a_2, ..., a_N`.

`1 <= N <= 20`

`-100 <= S <= 100`

`-1000 <= a_i <= 1000`

Output Format

A single integer, the number of non-empty subsets which sum to `S`. Two subsets are different if an element appears in one and does not appear in the other. Note that `a_1` is distinct from `a_2`, even if their values are identical.

Sample Input

```
6 5
2 4 1 1 1 2
```

Sample Ouput

8

Hint | View Solves (/chals/solves/111)

Liar 70 points

Reverse Engineering - Solved (261 solves)

Written by **michael**

Sometimes, developers put their source into their code with `-g`. Sometimes, they put another source into their code with `-g`.

- executable (https://cdn.easyctf.com/d692f7a8a8626a021ff89ce1227c9d51c7c59184d3934c1a73f3a0a84043588f_getflag)
- source (https://cdn.easyctf.com/c0a63b9876c7c3f3fb6df61d6131f24fb75ca7625426709932a0029d21d1d84c_getflag.c)

Hint | Already solved! | View Solves (/chals/solves/63)

In Plain Sight 70 points

Web - Solved (451 solves)

Written by **ztaylor54**

I've hidden a flag somewhere at this (http://blockingthesky.com) site... can you find it?

Note: There is not supposed to be a website. Nothing is "down". The YouTube link that some of you are finding is unintentional, please ignore it.

Hint | Already solved! | View Solves (/chals/solves/94)

Dig around and see what you can find

Adder 80 points

Reverse Engineering - Solved (381 solves)

Written by **soup**

This program adds numbers. Find the flag! adder (https://cdn.easyctf.com/70e2a1b332756922fcc09f0879b3271996b06434ed134749616b6035c0643d2a_adder)

Hint | Already solved! | View Solves (/chals/solves/57)

Adds numbers.

My Letter 80 points

Forensics - Solved (638 solves)

Written by **neptunia**

I got a letter in my email the other day... It makes me feel sad, but maybe it'll make you glad. :(file (https://cdn.easyctf.com/f91196f4d79a82fa40639752490f35838654a052cc74927dcb19f0b58224ad61_myletter.docx)

Hint | Already solved! | View Solves (/chals/solves/61)

the flag is not a rickroll

Nosource, Jr. 80 points

Web - Solved (401 solves)

Written by **gengkev**

I don't like it when people try to view source on my page. Especially when I put all this effort to put my flag verbatim into the source code, but then people just look at the source to find the flag! How annoying.

This time, when I write my wonderful website, I'll have to hide my beautiful flag to prevent you CTFers from stealing it, dagnabbit. We'll see what you're able to find (http://c1.easyctf.com:12486/jr/)...

Hint | Already solved! | View Solves (/chals/solves/64)

Did you know that Chrome Developer Tools has a Network tab?

Zippity 80 points

Miscellaneous - Solved (172 solves)

Written by **gengkev**

I heard you liked zip codes! Connect via `nc c1.easyctf.com 12483` to prove your zip code knowledge.

Hint | Already solved! | View Solves (/chals/solves/70)

I wonder if you could write a program...

Flag Time 80 points

Miscellaneous - Solved (151 solves)

Written by **neptunia**

This problem is so easy, it can be solved in a matter of seconds. Connect to `c1.easyctf.com:12482` .

Hint | Already solved! | View Solves (/chals/solves/74)

time for u to get an ez flag

Starman 1 80 points — Programming - Solved (113 solves)

Written by **blockingthesky**

Starman has taken off in search of a team to help him win EasyCTF! He's reached the asteroid belt, which everyone knows is the best place in the galaxy to find cybersecurity talent. Each asteroid is home to one superstar hacker. Starman wants to take all of the hackers back to Earth to help him with the competition, but unfortunately this isn't practical - all of the hackers are very attached to their asteroid homes, and won't go back to Earth unless Starman agrees to take the asteroids with him. Furthermore, each hacker has a skill rating `r`. To ensure a win in EasyCTF, Starman wants to maximize the sum of the rating values of his team members.

There are `N` hackers, and Starman's Roadster can carry up to `W` pounds of additional weight. Help him decide which hackers to bring home.

Input Format

The first line contains two integers `N` and `W`. The following `N` lines each contain two integers `r_i` and `w_i`, representing the skill and weight of the `ith` hacker. (`w_i` is the sum of a hacker and their asteroid's weight).

`1 <= N, W <= 2000`

`1 <= r_i, w_i <= 10000`

Output Format

A single integer, the best sum-of-ratings Starman can achieve while keeping the total weight added to his Roadster less than or equal to `W`.

Sample Input

```
5 15
6 7
3 4
3 5
10 11
8 8
```

Sample Ouput

```
14
```

Hint | View Solves (/chals/solves/107)

If you run into issues with the time limit, try reading up on Dynamic Programming.

Keyed Xor 100 points — Cryptography - Solved (202 solves)

Written by **sso999**

A flag has been encrypted using keyed xor. Can you decrypt it? File (/chals/autogen/58/keyed_xor.txt).

The key was created by taking two words from this (https://cdn.easyctf.com/1cdfad12bcae77ef64defecc1f5f030639e517c4e2ccac33b7ca6a1e059aafe9_words.txt) wordlist.

Hint | Already solved! | View Solves (/chals/solves/58)

Not OTP 100 points — Cryptography - Solved (89 solves)

Written by **neptunia**

It seems we've intercepted 2 strings that were both encrypted with what looks like OTP! Is it possible to decrypt them? file (https://cdn.easyctf.com/5c30e1da5ac35adbc813f58b543ade4101edf8bb4c41a17a243dddfbc611470a_ciphered.txt)

Hint | Already solved! | View Solves (/chals/solves/60)

I think there's something about cribs in there...

Diff 100 points — Forensics - Solved (343 solves)

Written by **soup**

Sometimes, the differences matter. Especially between the files in this archive (https://cdn.easyctf.com/9e60f4f6dd55b56236d3d266bb7219c5b92e6542b32c2d42913f3063bc67c390_file.tar).

Hint: This is a TAR (https://en.wikipedia.org/wiki/Tar_(computing)) archive file. You can extract the files inside this tar by navigating to the directory where you downloaded it and running `tar xf file.tar` ! If you don't have `tar` on your personal computer, you could try doing it from the Shell server. Once you extract the files, try comparing the hex encodings of the files against the first file.

Hint | Already solved! | View Solves (/chals/solves/67)

Check the man page for diff by typing "man diff".

rop1 120 points — Binary Exploitation - Solved (374 solves)

Written by **r3ndom**

Go to `/problems/rop1` on the shell server and tell me whats in flag.txt.

Hint | Already solved! | View Solves (/chals/solves/71)

Remember Me 130 points — Forensics - Solved (89 solves)

Written by **neptunia**

I'm such a klutz! I know I hid a flag in this file (https://cdn.easyctf.com/4e0f27a5304d4de898e843d5f1cd86b780b5f47eeb6eb12a8431e4a2aee9aa71_scarboroughfair.mp3) somewhere, but I can't remember where I put it!

Song is from sukasuka.

Hint | Already solved! | View Solves (/chals/solves/105)

Sometimes I can't tell my left from my right, either.

EzReverse 140 points

Reverse Engineering - Solved (201 solves)

Written by **soup**

Take a look at executable (https://cdn.easyctf.com/87ece32cf212ca63756402d7c103af5c1ca9fd8437247fd30dd27ad8c03fb802_executable). Objdump the executable and read some assembly!

Hint | Already solved! | View Solves (/chals/solves/80)

Time to read a bit of assembly! Did you know that characters are actually just integers? Take a look at an ASCII table for reference.

Soupstitution Cipher 150 points

Reverse Engineering - Solved (102 solves)

Written by **gengkev**

We had a flag, but lost it in a mess of alphabet soup! Can you help us find it (https://cdn.easyctf.com/e3325b38f103ded01739721441119df87a1ed16d71e4773ce68f080297da5c62_soupstituted.py)?

Connect to the server via `nc c1.easyctf.com 12484`.

Hint | Already solved! | View Solves (/chals/solves/79)

I love parsing characters!

Digging for Soup 150 points

Web - Solved (211 solves)

Written by **ztaylor54**

Perhaps this time I'll have hidden things a little better... you won't find my flag so easily now! `nicebowlofsoup.com`

Hint | Already solved! | View Solves (/chals/solves/86)

How do slave zones know when updates are made to the master?

AES 160 points

Cryptography - Unsolved (6 solves)

Written by sso999

There's an AES challenge running at `c1.easyctf.com 12487` (source (https://cdn.easyctf.com/18deeaeb1da832651a49be6036f5006aa92d256dd9ef04a7a3c3f9a39007f890_aes_redacted.py)).

Hint | Enter flag... | Submit → | View Solves (/chals/solves/73)

MalDropper 160 points

Reverse Engineering - Solved (81 solves)

Written by r3ndom

Mind looking at this malware dropper I found?

File (https://cdn.easyctf.com/a01d5e18abebb0aed0ae3dea333a04dd7004c13fc03a220d2726f94c7cdbc9ee_maldrop.exe)

Note: this isn't actually malware, it just borrows obfuscation techniques from low quality malware.

Hint | Already solved! | View Solves (/chals/solves/95)

Zipperoni 160 points

Miscellaneous - Solved (116 solves)

Written by gengkev

I've created a dastardly chain of zip files (https://cdn.easyctf.com/9a894176201a4b9a76c7ebe224239e127e3071bf2d3f2a7ecf974dcd26f96dfa_zip_files.tar). Now you'll never find my flag!

The first file is `begin.zip`, with password `coolkarni`.

Hint: You need to guess the password of the next zip file. However, the underscores in the pattern appear in the same positions as they do in the actual password, so you don't need to guess them. For example, the first pattern is `__0_0_`, which means that you need to guess the 3rd and 5th characters.

Hint | Already solved! | View Solves (/chals/solves/104)

I love writing Python programs, don't you?

format 160 points

Binary Exploitation - Solved (111 solves)

Written by r3ndom

Go to `/problems/format` on the shell server and tell me what is in `flag.txt`.

Hint | Already solved! | View Solves (/chals/solves/109)

Starman 2 175 points — Programming - Solved (37 solves)

Written by **blockingthesky**

Starman is back at it again! Having successfully brought back several hackers from the asteroid belt, he wants to eliminate the possibility of competition from the hackers he left behind. He has equipped his Roadster with an asteroid-destroying laser, but unfortunately he's only able to fire it once. Asteroids can be represented as points in a 2D plane. The laser, when fired, sends a beam of width `W` straight forward, and destroys everything in its path. Starman can go anywhere to fire his beam. It's expensive to fire wider beams, so your job is to find out the smallest possible width of the beam.

Input Format

The first line contains a single integer `N`, representing the number of asteroids. The following `N` lines each contain two integers `x_i` and `y_i`, representing the `x` and `y` coordinates of the `ith` asteroid.

`3 <= N <= 200000`

`-10^8 <= x_i, y_i <= 10^8`

Output Format

A decimal printed to six decimal places (including trailing zeroes; this can be accomplished using `printf` or your language's equivalent) representing the minimum possible value of `W`.

Sample Input

```
5
12 4
-2 5
-8 -7
-1 -11
5 3
```

Sample Ouput

```
11.234578
```

Hint | View Solves (/chals/solves/108)

RSA_v 200 points — Cryptography - Solved (121 solves)

Written by **sso999**

Bob is extremely paranoid, so he decided that just one RSA encryption is not enough. Before sending his message to Alice, he forced her to create 5 public keys so he could encrypt his message 5 times! Show him that he still is not secure... rsa.txt (https://cdn.easyctf.com/93e5ecf3d86c2b14b30dccdde65aa873f2a987b9830925d21ebd13d562c6cd46_rsa.txt).

Hint | Already solved! | View Solves (/chals/solves/59)

Souper Strong Primes 200 points

Cryptography - Solved (48 solves)

Written by **soup**

Technically I used strong primes. But are they really strong in this case? They are big, but there might still be an issue here. n.txt (https://cdn.easyctf.com/cb13154767c60d8743155794995cce49ed89bd8db82826c663bc959fe3e50c93_n.txt) e.txt (https://cdn.easyctf.com/0a573c75f5cf0508ec948a7b6262672b94dc7a7ccf0b95bde0de8de6e9f44b09_e.txt) c.txt (https://cdn.easyctf.com/69dad6eb12856f5a99ad33d8562b99c4bb68e40f62465c919a3309f2d66329df_c.txt)

Hint | Already solved! | View Solves (/chals/solves/77)

I chose "strong" primes, according to wikipedia. But are there strong primes that aren't cryptographically secure for RSA?

Pixelly 220 points

Reverse Engineering - Solved (52 solves)

Written by **gengkev**

I've created a new ASCII art generator (http://c1.easyctf.com:12489/), and it works beautifully! But I'm worried that someone might have put a backdoor in it. Maybe you should check out the source (https://cdn.easyctf.com/184a3fed376b4aafbb34e54e1c77efba87efdbda978952271d033aad7fb54488_asciinator.py) for me...

Hint | Already solved! | View Solves (/chals/solves/97)

How many characters do you really need, now?

Little Language 250 points

Miscellaneous - Solved (28 solves)

Written by **ztaylor54**

I want root access to this special programming portal, and this file is my only clue. Maybe the password is inside? Even if it is, I'm not sure how to enter it. encrypted (https://cdn.easyctf.com/469e2898fb0ed8d3a9307824b55dfca7a46d576215ef81ee7b1a4adb49e1bc6c_encrypted)

```
nc c1.easyctf.com 12480
```

Oh! Almost forgot... this (https://cdn.easyctf.com/c9d4e3c03232ec70f9d01d514f8d9e1beb781e9c0dd1256e7c8619f529f908e7_parser.txt) might help.

Hint | Already solved! | View Solves (/chals/solves/76)

One small step for man...

Nosource 250 points

Web - Solved (108 solves)

Written by **gengkev**

All you CTFers are sure getting on my nerves with your source-viewing and developer tools-ing! Alas, despite my best wishes, the experienced programmers on the wonderful website StackOverflow tell me that it's impossible (https://stackoverflow.com/q/6597224/689161) to keep you from looking at the HTML. But a disable right click script certainly won't stop an experienced CTFer like you! So finding the flag in the source of this problem should be no trouble, right (http://c1.easyctf.com:12486/)?

Hint | Already solved! | View Solves (/chals/solves/93)

If you can't beat 'em, maybe you can get around 'em somehow?

Hidden Key 250 points — Cryptography - Solved (91 solves)

Written by **arxenix**

Ugh, another RSA problem? Help me decrypt this message please file (/chals/autogen/102/hiddenkey.txt).

Hint | Already solved! | View Solves (/chals/solves/102)

i left an extra key in my back pocket

fumblr 275 points — Web - Solved (36 solves)

Written by **arxenix**

Come check out the latest blogging platform all the cool kids are using! I tried my hardest to make it hack-proof. If you can read the admin's hidden posts, I'll even give you a flag!! Good luck! (http://c1.easyctf.com:12491/)?

Hint | Already solved! | View Solves (/chals/solves/113)

you wish

LicenseCheck 300 points — Reverse Engineering - Unsolved (13 solves)

Written by **r3ndom**

I want a valid license for a piece of software, here (https://cdn.easyctf.com/a9cbb1f2340b2f04176e4b9550d6c2b92135d110f3baa6692be1a52c27385d0b_license_check.exe) is the license validation software. Can you give me a valid license for the email `mzisthebest@notarealemail.com` ?

Note: flag is *not* in easyctf{} format.

Hint | Enter flag... | Submit → | View Solves (/chals/solves/110)

Special Endings 350 points

Forensics - Solved (53 solves)

Written by **ztaylor54**

She taught us so much... tribute
(https://cdn.easyctf.com/7f48859f2f9669e3398ef75f2516d0aa4c64784d724010291d0d4777af3bbf6b_encrypted_lines.txt)

Hint | Already solved! | View Solves (/chals/solves/68)

RFC 4648

Fanfic Studio 350 points

Binary Exploitation - Solved (50 solves)

Written by **arxenix**

Go to `/problems/fanfic` to check out my cool fanfic writing tool. I expect you to send me some steamy fanfics of michael.

Hint | Already solved! | View Solves (/chals/solves/106)

RSA Returns 400 points

Cryptography - Unsolved (11 solves)

Written by **neptunia**

It's the return of everyone's favorite cryptosystem! Crack it for another flag. Help me decipher file (/chals/autogen/83/hardrsa.txt).

Hint | Enter flag... | Submit → | View Solves (/chals/solves/83)

lolno