

SSSHIT

crypto / SSSHIT / medium 27 solves / 395 points

qxxxb

SSS is so cool

`nc pwn.chall.pwnoh.io 13382`

Downloads

`chall.py`

Command:

```
1 / 1 + [ ] ... ultuser-virtual-machine: ~/Desktop
1: defaultuser@defaultuser-virtual-machine: ~/Desktop
defaultuser@defaultuser-virtual-machine:~/Desktop$ nc pwn.chall.pwnoh.io 13382
I wrote down a list of people who are allowed to get the flag and split it into
3 using Shamir's Secret Sharing.
Your share is:
(1, 7727483683389350145362654926302674432757044884286911375689562670244252142111
84003327239414504640406200840298631762240253489952704751033815051010946316812)
The other shares are:
(2, 5096296290156302796289797101567826986777024396797504163350315676363726601927
245251838018626682197154861907296894153733851869217115050645213821204271959217)
(3, 436516898068157103717011755442595031295366856468227224028657600590263410762
697150215493018914645984401195958439677918938390738785106792758544517750156321)

Now submit your share for reconstruction:
>>>
```

About Website:

https://en.wikipedia.org/wiki/Shamir%27s_Secret_Sharing

Entering input 1:

```

defaultuser@defaultuser-virtual-machine:~/Desktop$ nc pwn.chall.pwnoh.io 13382
I wrote down a list of people who are allowed to get the flag and split it into
3 using Shamir's Secret Sharing.
Your share is:
(1, 2796811140590795409914723240259381591888052427789331791748547356255231562159
181485991930883699738725881506316453454318094444214546832211682581455918075296)
The other shares are:
(2, 4382309831885614724469414903472615770489006160428880125720720778622782919149
67474822669529653781792817914379808722159200377388347670036307633832358853682)
(3, 6327140361102707982582656191849731133764781171112877488738784764787454214958
63063123465236889455189303932113669432002348229477517677381934084825638024086)

Now submit your share for reconstruction:
>>> (1, 772748368338935014536265492630267443275704488428691137568956267024425214
21118400332723941450464040620084029863176224025348995270475103381505101094631681
2)
Sorry, only these people can see the flag: b'\x1f=\xe7\r\x03\xe0\xfb\xba\xbf
\t\x88\xe1\xb4M\x1dn\x8eI$E\xca\xb6\xc5\x17;+\x0eq\xf8\x18\x0b\xde\x0f%\xe8\x0f\
\xe7\xfb\xae6\r\xe6\xed=o\x9bY89\x14$?\x88\xbaTE\xae$@\xf6u\xad$'

```

Entering Input 2:

```

defaultuser@defaultuser-virtual-machine:~/Desktop$ nc pwn.chall.pwnoh.io 13382
I wrote down a list of people who are allowed to get the flag and split it into
3 using Shamir's Secret Sharing.
Your share is:
(1, 1515021963207432298012916568353491169043017319190138235386622267189579439929
641455059070122350978062543180850118082927023943515202472086979165470485929311)
The other shares are:
(2, 2809124450769001404190389601749179660280000674015129390727318734928159643845
338246135776394112941607534275131900254032027000030448997893757539107505856424)
(3, 3882307462684707318532419100187065473710950064474973466022089403272172171923
007146971423628191485309696435497308635450631516816258103523590249575439357488)

Now submit your share for reconstruction:
>>> (2, 618201442871921519608211202652908709164895475620779587214043914182141667
23803506940238518851994120955314765911794695907464055413721579014473993369882556
11)
Bad input

```

Entering Input 3:

```

defaultuser@defaultuser-virtual-machine:~/Desktop$ nc pwn.chall.pwnoh.io 13382
I wrote down a list of people who are allowed to get the flag and split it into
3 using Shamir's Secret Sharing.
Your share is:
(1, 8715445772923332429108262079781533210102736598050761936981057427222980409647
747124539648061568768347172846482222744380564981165820909087309925102467313079)
The other shares are:
(2, 1607385888703523892091822299147413161389605989652249231453810455862043485957
811751247362979640074824837268640130609791298305226946448337571127520718014184)
(3, 1879914563704744756034387204970071331196934786426382298852811528665797341579
347841692298268868626609472140902786460199736033002667857059941494540425956126)

Now submit your share for reconstruction:
>>> (3, 187991456370474475603438720497007133119693478642638229885281152866579734
15793478416922982688686266094721409027864601997360330026678570599414945404259561
26)
Bad input

```

Entering all three inputs:

```

defaultuser@defaultuser-virtual-machine:~/Desktop$ nc pwn.chall.pwnoh.io 13382
I wrote down a list of people who are allowed to get the flag and split it into
3 using Shamir's Secret Sharing.
Your share is:
(1, 646370684728056819111699296844250075269085444683184715412487689621852977474
8944015695635068222088255681506510289060007092139683101187924506604739731244574
)
The other shares are:
(2, 213664703938346027457517129776603872274433812769407225248658574249406026043
5691667365759318761500064206396948701683933087255492768744662301544018126168734
)
(3, 547220937486665024792736472681059212379728700684579573242568471422768620240
5183817887181407301879509443386430125597233623743724132502934253138433866625351
)

Now submit your share for reconstruction:
>>> (1, 87154457729233324291082620797815332101027365980507619369810574272229804
0964774712453964806156876834717284648222274438056498116582090908730992510246731
3079)
The other shares are:
(2, 160738588870352389209182229914741316138960598965224923145381045586204348595
7811751247362979640074824837268640130609791298305226946448337571127520718014184
)
(3, 187991456370474475603438720497007133119693478642638229885281152866579734157
9347841692298268868626609472140902786460199736033002667857059941494540425956126
)
Sorry, only these people can see the flag: b'\x80\xfa\xcf\xdc2$D+#\xf7&\xd0G\xb
c!B\xc9\xa0i\xdd\x8a\xec\xef7\x8f\xee\xbe\xe5\xf3\x8a]\xac\x8a\xdc0\xe7\x04W\x1f\
xf5\xfd\x8cZ\xb8JJ\r\x1e\xff\xfc0\xdb\xe73\xacZ\xa4\xa0(\x8d\xf8\xc44\x00;F '

```

Found this website:

<https://simon-frey.com/s4/>

Simple Shamir's Secret Sharing (s4)

Share your secret with a cryptographically secure method. All running locally in your browser. Your secrets never leave your machine!

Your browser is online. Please disconnect from your network to use s4 in a safer way.

You are running s4 from a webserver, this is insecure. Please save the webpage (Ctrl+S) locally and open this file.

Encrypt

Decrypt

Info

Shares:

3

Enter a share here

Enter a share here

Enter a share here

Your decrypted output

Using hex to ASCII for input 1:

<https://www.binaryhexconverter.com/hex-to-ascii-text-converter>

Hex to Ascii (String) Converter

To use this **hex to string converter**, type a hex value like 6C 6F 76 65 and into the left field below and hit the Convert button. You will get the according string.

Facebook

Twitter

Hexadecimal Value

b7ebe90396b3c7dc11e4b8ecde080ca212dffdf9cf
e1bd0a8c2d698fac1e099961c15e7f2e0f73f0

Convert

Ascii (String)

·éÇÜüä, iB cBýùIá*
-i-ä^f. sō

swap conversion: [Ascii Text To Hexadecimal Converter](#)

Using hex to ASCII for all three input :

Hex to Ascii (String) Converter

To use this **hex to string converter**, type a hex value like 6C 6F 76 65 and into the left field below and hit the Convert button. You will get the according string.

Facebook

Twitter

Hexadecimal Value

b80facfd2Df7d0bcBc9a0dd8aecf78feebee5f38aa
c8ad0e7041ff5fd8cb81efff0dbe73aca4a08df8c4

Convert

Ascii (String)

·-ý-÷D*
ØIxpbēi 8*ÈpAy_ØEiÿ
¾S-α Ä@

swap conversion: [Ascii Text To Hexadecimal Converter](#)