

**Question :** If you have kept tabs on this page you would have noticed something unusual. Transform from unfamiliar words to familiar digits to obtain a set of 5 numbers.

If the numbers are a,b,c,d,e;

Calculate the number of permutations of these digits in the expression `a+b-c+d-e` that result in `1`.

The flag is the number of permutations that satisfy the above in the format:

CTF{number\_of\_perms\_satisfied}

For eg :

If the digits were 0,7,3,5,2

$$(3+5-0+7-2)=1$$

$$(3+5-2+0-7)=1$$

$$(5+3-0+7-2)=1$$

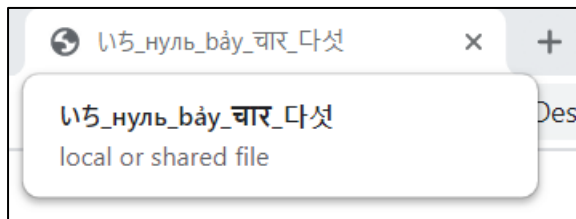
$$(5+3-2+0-7)=1$$

4 such permutations, therefore flag would be:

CTF{4}

**Possible Hint :** Have a look at the title of the webpage to get the numbers, then permute them in the given expression and count how many of those result in `1`.

**Solution :** The required numbers can be found in the title of the webpage in various languages.



In the picture :

いち - one in Japanese

нуль - zero in Russian

bảy - seven in Vietnamese

चार- four in Hindi

다섯 - 5 in Korean

The flag `CTF{12}` is the number of times you obtain `1` with the given numbers when permuted in the given expression (a+b-c+d-e). Though this can be solved by finding out patterns as well, the code for permuting with its output are given below:

Follow the link for code : <https://gist.github.com/veezo101/047f464169b49d2fce6b18a9614c8278>

**Output :**

```
1
[0, 4, 1, 5, 7]
1
[0, 4, 7, 5, 1]
1
[0, 5, 1, 4, 7]
1
[0, 5, 7, 4, 1]
1
[4, 0, 1, 5, 7]
1
[4, 0, 7, 5, 1]
1
[4, 5, 1, 0, 7]
1
[4, 5, 7, 0, 1]
1
[5, 0, 1, 4, 7]
1
[5, 0, 7, 4, 1]
1
[5, 4, 1, 0, 7]
1
[5, 4, 7, 0, 1]
No of permuted expressions resulting in 1 : 12
```