



EXERCISES — Highest Common Factor

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**The way is lit. The path is clear.
We require only the strength to follow it.**

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*<https://intra.assistants.epita.fr>

File Tree

```
highest_common_factor/  
└─ hcf.sh  (to submit)
```

Authorized commands : You are only allowed to use the following commands

- builtins

Reminder : Grant execution permission to your scripts before pushing them

1 Goal

Write a script taking two numbers as argument and printing the highest common factor of these two numbers. Arguments will always be positive numbers. If you have more or less than two arguments, you have to print Usage: `./hcf.sh num1 num2` on the standard output and your script must return 1.

Remember, to compute the HCF of a and b , you have to divide a by b and take the remainder. a becomes b , and b become the remainder. Then repeat until the remainder is 0. The HCF will be a .

2 Example

```
42sh$ ./hcf.sh  
Usage: ./hcf.sh num1 num2  
42sh$ echo "$?"  
1  
42sh$ ./hcf.sh 64 24  
8  
42sh$ ./hcf.sh 42 42  
42  
42sh$ ./hcf.sh 5 7  
1  
42sh$ echo "$?"  
0
```

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