Push_swap

Because Swap_push isn't as natural

Summary:
This project will make you sort data on a stack, with a limited set of instructions, using the lowest possible number of actions. To succeed you'll have to manipulate various types of algorithms and choose the most appropriate solution (out of many) for an optimized data sorting.

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Chapter I

Foreword

- C

```
#include <stdio.h>

int main(void)
{
   printf("hello, world\n");
   return 0;
}
```

- ASM

```
cseg segment
assume cs:cseg, ds:cseg
org 100h
main proc
jmp debut
mess db 'Hello world!$'
debut:
mov dx, offset mess
mov ah, 9
int 21h
ret
main endp
cseg ends
end main
```

- LOLCODE

```
HAI
CAN HAS STDIO?
VISIBLE "HELLO WORLD!"
KTHXBYE
```

- PHP

```
<?php
 echo "Hello world!";
?>
```

- BrainFuck

```
++++++++++[>+++++++>++++++++++>+++>+<<<<-]
>++.>+.+++++++..+++.>++.
<<++++++++++++++.>.+++.------.--------.>+.>.
```

- C#

```
using System;

public class HelloWorld {
   public static void Main () {
      Console.WriteLine("Hello world!");
   }
}
```

- HTML5

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset="utf-8">
      <title>Hello world !</title>
   </head>
   <body>
      <p>Hello World !</p>
   </body>
</html>
```

- YASL

```
"Hello world!"
print
```

- OCaml

```
let main () =
   print_endline "Hello world !"

let _ = main ()
```

Chapter II

Introduction

The **Push swap** project is a very simple and a highly straightforward algorithm project: data must be sorted.

You have at your disposal a set of integer values, 2 stacks, and a set of instructions to manipulate both stacks.

Your goal? Write a program in C called `push_swap` which calculates and displays on the standard output the smallest program, made of *Push swap language* instructions, that sorts the integers received as arguments.

Easy?

We'll see...