



B1- Unix and C Lab Seminar

B-CPE-100

Rush#1

The Squares

v2.0



Rush#1

The Squares

repository name: CPool_rush1_\$ACADEMICYEAR

repository rights: ramassage-tek

language: C

group size: 2



- Your repository must contain the totality of your source files, but no useless files (binary, temp files, obj files,...).
- Don't push your **main** function into your delivery directory, we will be adding our own. Your files will be compiled adding our **main.c** and our **my_putchar.c** files.
- You are only allowed to use the **my_putchar** function to complete the following tasks, but don't push it into your delivery directory, and don't copy it in *any* of your delivered files.
- If one of your files prevents you from compiling with *.c, the Autograder will not be able to correct your work and you will receive a 0.



Only the team leader's delivery repository will be evaluated.



Segfault, bus error, floating exception are all grounds for disqualification!



Allowed function: write



Don't forget to write unit tests for all your functions!
Check out Day04 if you need an example, and re-read this document.



The goal of this project is to display a square on the screen. In each assignment, the squares will look differently (see below). You have to write the *rush* function, which will be called by **our** main function, which will look like this:

```
void    rush(int x, int y);

int main()
{
    rush(5, 5);
    return (0);
}
```

In case of error, the function should return and display *"Invalid size \n"* on the **standard error output**.



All assignments must be done.

Team work

Here are a couple of important rules to follow:

- The **team leader** must register his/her group for the oral presentation.
- You will find the list of mandatory groups and your assignment number in the **group_\$YEAR_\$CITY.txt** file.
- You must complete your oral presentation on Sunday, at the right time, and *with all of your partners*.
- Every member of the group should be fully aware of the work you will have completed. Each member will be questioned, and your group's grade will be based on the worst explanations.
- You have to do everything within your power to contact your partners; look at their intranet profile, find them on Facebook or by any other mean. **Excuses regarding group problems will not be accepted.**
If, after you have tried **everything**, and your partner is still unreachable, send an email to the local staff **ASAP**.



Assignment 1

Here are the awaited displays when calling *rush(5,3)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
o---o
|   |
o---o
```

When calling *rush(5, 1)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
o---o
```

When calling *rush(1, 1)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
o
```

When calling *rush(1, 5)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
o
|
|
|
|
o
```

When calling *rush(4, 4)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
o--o
|  |
|  |
o--o
```

Delivery: CPool_rush1_\$ACADEMICYEAR/rush1-1/



A test binary is available on the intranet. **Usage:** `./rush1-1 x y`



The error messages must be displayed on the error output.



Assignment 2

Here are the awaited displays when calling *rush(5,3)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
/***\
*   *
\***/
```

When calling *rush(5, 1)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
*****
```

When calling *rush(1, 1)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
*
```

When calling *rush(1, 5)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
*
*
*
*
*
```

When calling *rush(4, 4)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
/**\
*  *
*  *
\**/
```

Delivery: CPool_rush1_\$ACADEMICYEAR/rush1-2/



A test binary is available on the intranet. **Usage:** `./rush1-2 x y`



The error messages must be displayed on the error output.



Assignment 3

Here are the awaited displays when calling *rush(5,3)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
ABBBB
B  B
CBBBC
```

When calling *rush(5, 1)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
BBBBB
```

When calling *rush(1, 1)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
B
```

When calling *rush(1, 5)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
B
B
B
B
B
```

When calling *rush(4, 4)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
ABBA
B  B
B  B
CBBBC
```

Delivery: CPool_rush1_\$ACADEMICYEAR/rush1-3/



A test binary is available on the intranet. **Usage:** `./rush1-3 x y`



The error messages must be displayed on the error output.



Assignment 4

Here are the awaited displays when calling *rush(5,3)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
ABBBBC
B  B
ABBBBC
```

When calling *rush(5, 1)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
BBBBBB
```

When calling *rush(1, 1)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
B
```

When calling *rush(1, 5)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
B
B
B
B
B
```

When calling *rush(4, 4)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
ABBC
B  B
B  B
ABBC
```

Delivery: CPool_rush1_\$ACADEMICYEAR/rush1-4/



A test binary is available on the intranet. Usage: `./rush1-4 x y`



The error messages must be displayed on the error output.



Assignment 5

Here are the awaited displays when calling *rush(5,3)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
ABBBBC
B  B
CBBBA
```

When calling *rush(5, 1)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
BBBBB
```

When calling *rush(1, 1)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
B
```

When calling *rush(1, 5)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
B
B
B
B
B
```

When calling *rush(4, 4)*:

```
Terminal
~/B-CPE-100> cc *.c; ./a.out
ABBC
B  B
B  B
CBBA
```

Delivery: CPool_rush1_\$ACADEMICYEAR/rush1-5/



A test binary is available on the intranet. **Usage:** `./rush1-5 x y`



The error messages must be displayed on the error output.