

Tute 3

COMP1511 23T1

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content

- while loops
- enums and structs
- variable names

1D while loops

easiest to look at

<https://cgi.cse.unsw.edu.au/~cs1511/23T1/tut/03/questions>

A

5
4
3
2
1

D

5
4
3
2
1
0

G

0
0
0
0
[...]

B

1
2
4
8
16

E

5

H

0

C

0
2
4
[...]
28
30

F

Runtime error: uninitialized variable accessed.

2D while loops

easiest to look at

<https://cgi.cse.unsw.edu.au/~cs1511/23T1/tut/03/questions>

```
int row = 0;
while (row < SIZE) {
    int col = 0;
    while (col < SIZE) {
        printf("X");
        col = col + 1;
    }
    printf("\n");
    row = row + 1;
}
```

A

0XXX
X0XX
XX0X
XXX0

B

0X0X
0X0X
0X0X
0X0X

C

0X00
XXXX
0X00
0X00

D

XXXX
X00X
X00X
XXXX

enums and structs

in your groups, come up
with a struct and
accompanying enum(s) to
describe a menu item at a
restaurant.

e.g

```
struct menu_item {  
    double price  
    enum course course  
};  
  
enum course {  
    BREAKFAST,  
    LUNCH,  
    DINNER  
};
```


structs

a way of grouping related information together

enums

for different options for what the value of something
could be

variable names

In your groups, come up with at few variable names for each category (if will likely fall into multiple)

- valid
- invalid
- bad style
- good style

variable name rules

Valid C:

- can only contain letters, numbers, or underscores.
- must not start with a number.
- cannot be a reserved keyword (e.g. `return`)

Good style:

- use snake_case
- be descriptive or conventional (e.g. `i` in loops)
- #defines in SHOUTING_SNAKE_CASE.