

Exam 1 in 1 week during lab

- attend during your registered lab time
- submission of your program will be via Blackboard
- you will have 1 hr 50 minutes to submit your program

For the exam, you will write and submit a C working program.

During the exam you will be allowed:

- access to existing code
- access to whatever notes, books that you might like
- access to the internet (if the network co-operates)
- access to your own machine

The exam will most likely consist of one of the following ideas

- using a stack implemented via a dynamic array
- using a stack implemented via a linked list
- using a queue implemented via a dynamic array
- using a queue implemented via a linked list

The 6 operations that you should have ready to go are:

- `init()`
- `isEmpty()`
- `top()` or `front()`
- `push()` or `enqueue()`

- pop () or dequeue ()
- reset ()

Input will most likely be a list of numeric values.

Read in the value until some terminal value is encountered.

Input is read in via a simple scanf() statement

```
int val;
```

```
scanf ("%d", &val);
```

```
-----  
float fval;
```

```
scanf ("%f", &fval);
```

Enums:

```
typedef enum colors_enum_name
```

```
    {black, blue, green, cyan, red, purple, yellow, white}
```

```
colors_t;
```

```
colors_t color1;
```

```
color1 = green;
```

```
color1 = pink; // error
```

```
if ( color1 == cyan)
```

```
{
```

```
    printf ("%s", cyan); //error - cyan is really an integer
```

```
    printf ("%d", cyan); // this may work
```

```
    printf ("%d", (int)cyan ); // this will work, printing 3
```

```
    printf ("%d", (int)color1 ); // this will work, printing 3
```

```
    printf ("cyan");
```

```
}
```

```
=====
```

Days of the week, where Sunday is 1

```
typedef enum daysOfWeekEnum
```

```
{ sun = 1 , mon, tue, wed, thu, fri, sat }
```

```
daysOfWeek;
```

```
=====
```

Creation of a Boolean type

```
typedef enum boolean
  { FALSE, TRUE, false = 0, true, False = 0, True, no = 0, yes }
boolean;
```