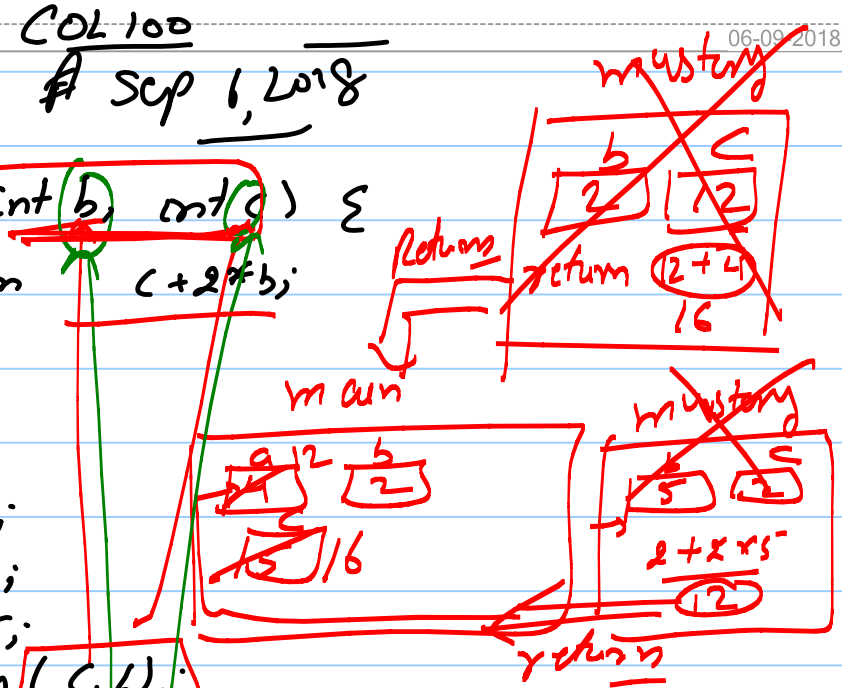
Note Title 06-09-2018

COL 100

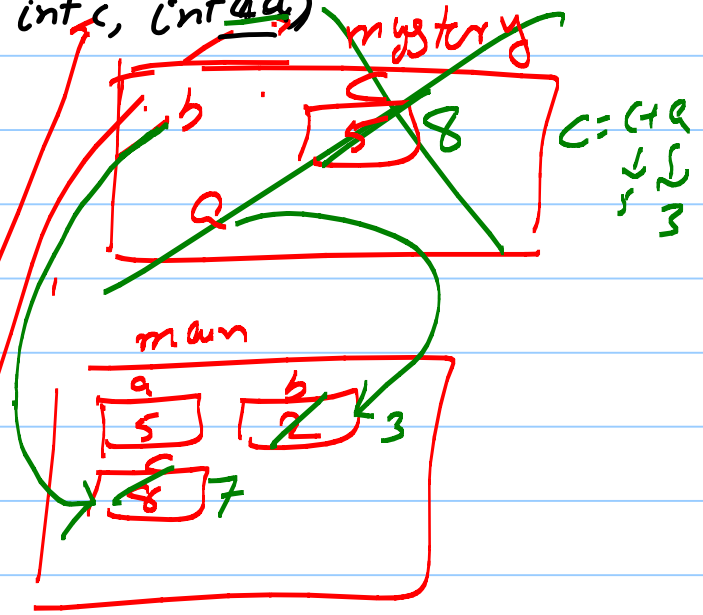
6 Sep 1, 2018

```
int mystery(int b, int c) {
    return c + 2*b;
}

int main() {
    int a = 4;
    int b = 2;
    int c = 5;
    a = mystery(c, b);
    c = mystery(b, a);
    cout << "a " << a << " " << b << " " << c << endl;
    return 0;
}
```



12 2 16

```
void mystery(int &b, int c, int &a)
{
    a++;
    b--;
    c += a;
}

int main() {
    int a = 5;
    int b = 2;
    int c = 8;
    mystery(c, a, b);
    cout << a << " " << b << " " << c << endl;
    return 0;
}
```



5 3 7

```
#include <cmath>
int y = round(abs(-3.7));
```

3.7 → 4

Assignment 1 Q. (03):-

$$\frac{1}{\pi} = \frac{\sqrt{8}}{9801} \sum_{n=0}^{\infty} \frac{(4n)!}{(n!)^4} \times \frac{(26390n + 1103)}{(396)^{4n}}$$

double a = sqrt(8)

pow(a,b)

long double

a^b

32,768

32,000

long long int a = 10;

$-(2^{15})$ to $(2^{15}-1)$

16 bit

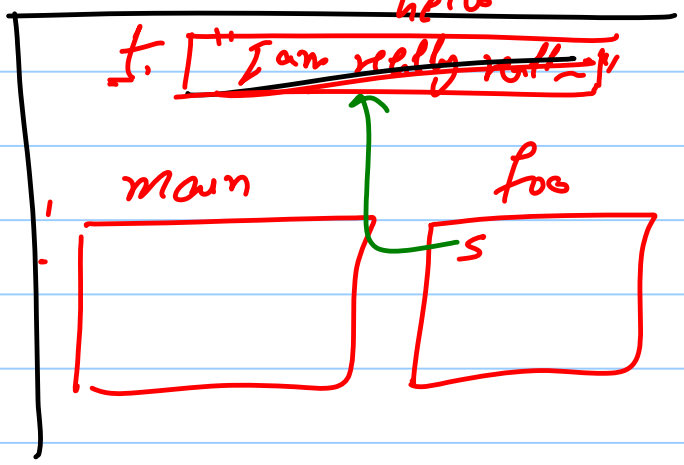
#gmath ?

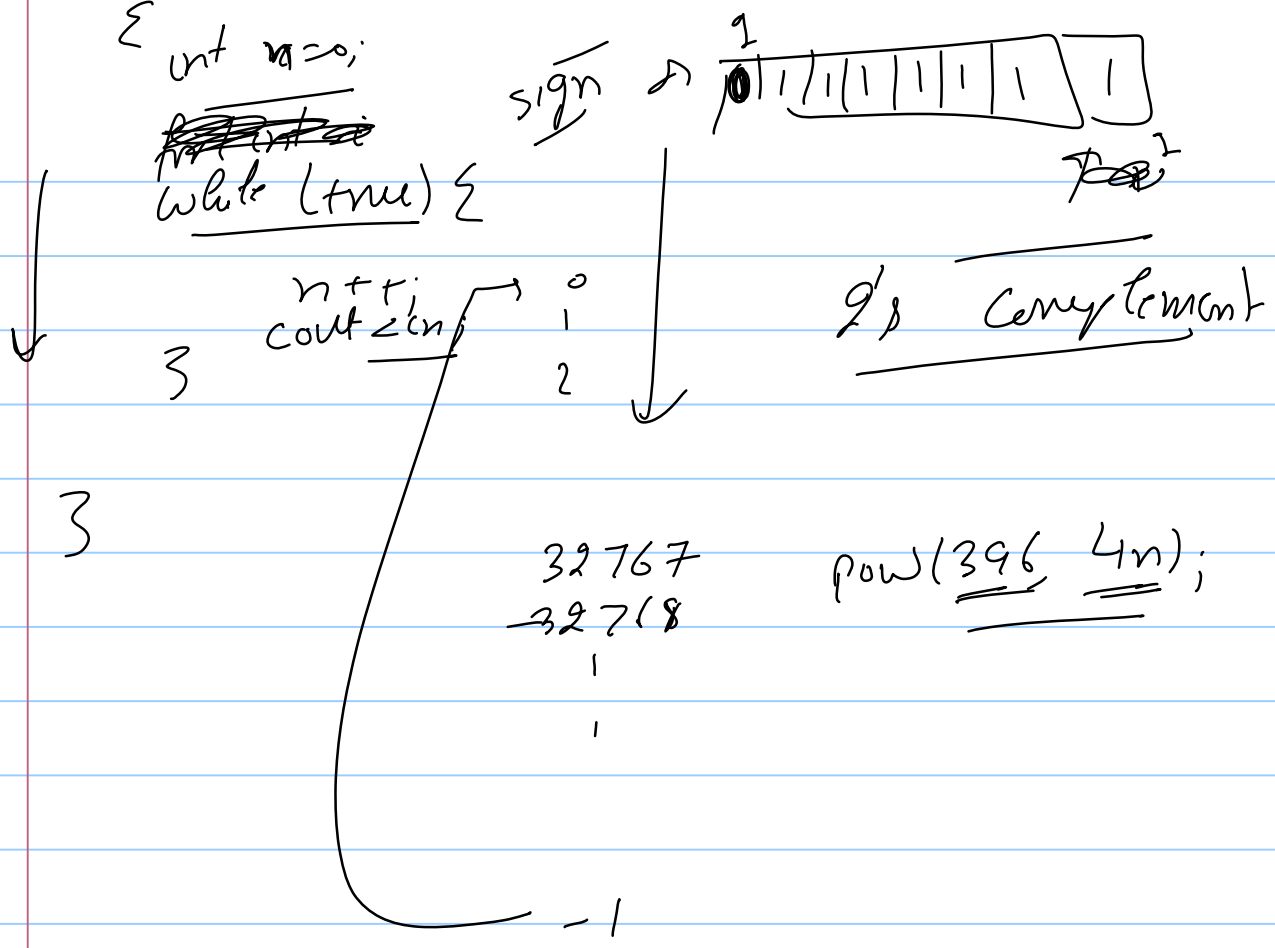
cmath

$\left(\frac{2^6-1}{2}\right)\left(2^{n-1}\right)\left(2^{n-1}\right)$

```
#include <iostream>
#include <string>

string t = "I am really really long string";

void foo (const string &s ) {
    s = "hello";
    t = "hello";
    cout << s << endl;
}

int main() {
    foo(t);
    return 0;
}
```

//hello




{
int n=0;
while (true) {
n++;
cout<<n;
}
}
sign
1
0
1
1
1
1
1
1
2
2's complement
32767
32768
-1
pow(396, 4n);

Strings:-

string str = "hello";

append( )
erase( )
length, size
substr(index, len)
· find
insert(index, str)
replace(index, len, str)

str[i]
str.at(i)

str[1] = 'p'; — str → hpllo
str.at(1) = 'p'; —

include "strlib.h"

string str = "COL 100";

(1) endsWith(str, suffix)

startsWith(str, suffix)

if (endsWith(str, "100")){
cout << "came inside" << endl;
}

(2) integerToString(int)

realToString(double)

member functions

string str1 = str.substr(2);
cout << str1;

string s = string("hello") + string("there");

← s.c_str()

C-string   C++ string // OL 100

"hello"

error

"hello" + "there";

string s = "hello";
string s1 = "there";
s = s + s1;