-(2018cs94.cpp)-

```
#include <iostream>
using namespace std;
int g_c_d(int a, int b)
{
if (a == 0)
{
return b;
}
if (b == 0)
{
return a;
}
if (a == b)
{
return a;
}
if (a > b)
{
return gcd(a-b, b);
}
return gcd(a, b-a);
}
int main()
{
int a = 100, b = 50;
cout<<"GCD is "<<gcd(a, b);
return 0;
}
```

-(2018cs96.cpp)-

```
// C++ program to find GCD of two numbers
#include <iostream>
using namespace std;
// Recursive function to return gcd of a and b
int gcd(int a, int b)
{
// Everything divides 0
if (a == 0)
return b;
if (b == 0)
return a;

// base case
if (a == b)
return a;

// a is greater
if (a > b)
return gcd(a-b, b);
return gcd(a, b-a);
}

// Driver program to test above function
int main()
{
int a = 100, b = 50;
cout<<"GCD of "<<a<<" and "<<b<<" is "<<gcd(a, b);
return 0;
```