

U20CS100 ADITYA RAJ CO Assignment 2

HEADER FILE

header.h

```
#include <stdio.h>

int binAddition(int a, int b)
{
    int c;
    while (b != 0)
    {
        c = (a & b) << 1;

        a = a ^ b;
        b = c;
    }
    return a;
}

int binSubtraction(int a, int b)
{
    int carry;

    b = binAddition(~b, 1);

    while (b != 0)
    {
        carry = (a & b) << 1;

        a = a ^ b;
        b = carry;
    }
    return a;
}

void division_unsigned_binary_numbers_Y20CS100(int a, int b)
{
    int count = 0;
    int rem;
```

```

while (a >= b)
{
    a = binSubtraction(a, b);
    count++;
}
rem = a;
printf("The answer is %d with a remainder of %d ", count, rem);
}

```

MAIN FILE

Main.c

```

#include <stdio.h>
#include "header.h"

int main()
{
    int a, b;
    printf("Enter number a : ");
    scanf("%d", &a);

    printf("Enter number b : ");
    scanf("%d", &b);

    division_unsigned_binary_numbers_Y20CS100(a, b);
}

```

OUTPUT:

```

Enter number a : 55
Enter number b : 24
The answer is 2 with a remainder of 7

```