

Github link: <https://github.com/pelotazos123/FLCD-erasmus/tree/main/Lab8>

Lexical analyzer implemented in C using FLEX

```
Reserved word: int
```

```
Separator:
```

```
Word: max
```

```
Separator: (
```

```
Separator: )
```

```
Operator: :
```

```
Separator:
```

```
Reserved word: int
```

```
Separator:
```

```
Word: a
```

```
Separator:
```

```
Reserved word: int
```

```
Separator:
```

```
Word: b
```

```
Separator:
```

```
Reserved word: int
```

```
Separator:
```

```
Word: c
```

```
Separator:
```

```
C:\Users\pablo\Documents\LEXFLCD>test1.exe p2.txt
Reserved word: int
Separator:
Word: gcd
Separator: (
Separator: )
Operator: :

Separator:
Reserved word: int
Separator:
Word: a

Separator:
Reserved word: int
Separator:
Word: b

Separator:
Reserved word: int
Separator:
Word: x
Separator:
Set: =
Separator:
Char: 1
```

P1 used:

int max():

int a

int b

int c

if (a > b)

if (a > c)

return a

return c

if (b > c)

return b

return c

int min():

```
int a
```

```
int b
```

```
int c
```

```
if (a < b)
```

```
    if (a < c)
```

```
        return a
```

```
    return c
```

```
if (b < c)
```

```
    return b
```

```
return c
```

```
bool prime(int n):
```

```
    for (int i = n; i >= 0; i--)
```

```
        if (n%i==0)
```

```
            return false
```

```
    return true
```

```
P2 used:
```

```
int gcd():
```

```
    int a
```

```
    int b
```

```
    int x = 1
```

```
    for (int l = 1; l <= a & l <= b; l++)
```

```
        if (a%i == 0 & n2 % i == 0)
```

```
            x = i
```

```
    return x
```

```
int equation():
```

```
    int a
```

```
int b
```

```
int c
```

```
int x1
```

```
int x2
```

```
x1 = (-b + (b^2 - 4 * a * c)^(1/2))/2
```

```
x2 = (-b - (b^2 - 4 * a * c)^(1/2))/2
```

```
print("x1 = ", x1)
```

```
print("x2 = ", x2)
```