

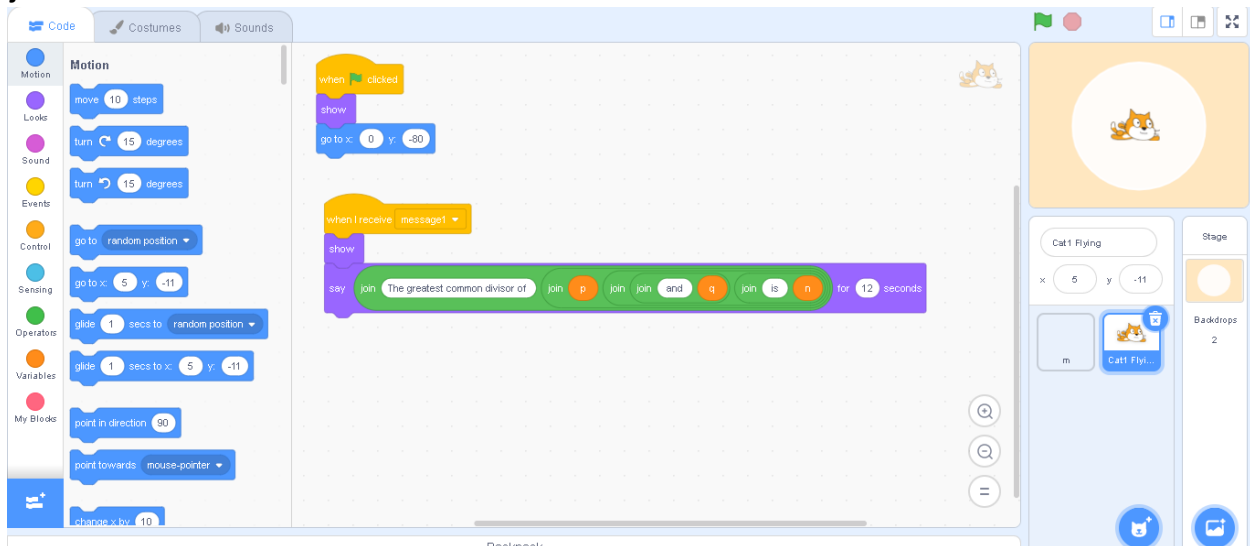
$C \leq \text{EUCLID}(a, b)$

Inputs a, b : integers with $a \geq b \geq 0$,

And $a \neq 0$

Outputs d : $\text{gcd}(a, b)$

```
{  
    u=a; v=b  
    While (v > 0)  
    {  
        r = u mod v;  
        U = v; v = r;  
    }  
    d = u ;  
}
```



Code Costumes Sounds

Motion

- move 10 steps
- turn 15 degrees
- turn 15 degrees
- go to random position
- go to x: 15 y: -44
- glide 1 secs to random position
- glide 1 secs to x: 15 y: -44
- point in direction 90
- point towards mouse-pointer
- change x by 10

when clicked

```

ask Chose a number. and wait
set m to answer
ask Chose another number. and wait
set n to answer
set p to m
set q to n

wait until n = answer
repeat until m = 0
  repeat until n < m
    set n to n - m
  set s to m
  set m to n
  set n to s
broadcast message1 and wait
  
```

Stage

m

x: 16 y: -44

Backdrops

2

Backpack

Code Costumes Sounds

Motion

- move 10 steps
- turn 15 degrees
- turn 15 degrees
- go to random position
- go to x: 0 y: -80
- glide 1 secs to random position
- glide 1 secs to x: 0 y: -80
- point in direction 90
- point towards mouse-pointer
- change x by 10

when clicked

```

show
go to x: 0 y: -80

when I receive: message1
show
say join The greatest common divisor of join p join join and q join to
  
```

Stage

Chose a number.

100

Sprite: Cat1 Flying

x: 0 y: -80

Show: [] [] Size: 100 Direction: 90

Backdrops

2

Backpack

Code

Costumes

Sounds

Motion

- move 10 steps
- turn 15 degrees
- turn 15 degrees
- go to random position
- go to x: 0 y: -80
- glide 1 secs to random position
- glide 1 secs to x: 0 y: -80
- point in direction 90
- point towards mouse-pointer
- change x by 10

when clicked

show

go to x: 0 y: -80

when I receive message1

show

say join The greatest common divisor of join p join join and join q join is

Chose another number.

50

Sprite: Cat1 Flying

x: 0 y: -80

Size: 100 Direction: 90

Stage

Backdrops

Backpack

Code

Costumes

Sounds

Motion

- move 10 steps
- turn 15 degrees
- turn 15 degrees
- go to random position
- go to x: 0 y: -80
- glide 1 secs to random position
- glide 1 secs to x: 0 y: -80
- point in direction 90
- point towards mouse-pointer
- change x by 10

when clicked

show

go to x: 0 y: -80

when I receive message1

show

say join The greatest common divisor of join p join join and join q join is

The greatest common divisor of 100 and 50 is 50

The greatest common divisor of 100 and 50 is 50

Sprite: Cat1 Flying

x: 0 y: -80

Size: 100 Direction: 90

Stage

Backdrops

Backpack