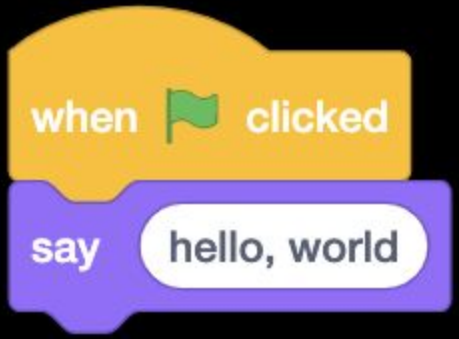
This is CS50


when clicked
say
hello, world

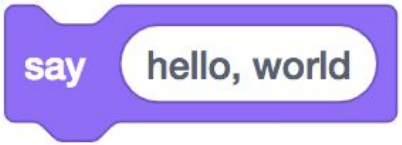
```c
#include <stdio.h>

int main(void)
{
    printf("hello, world\n");
}
```

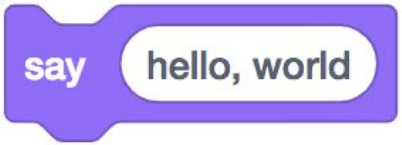
```
print("hello, world")
```

```
make hello

./hello
```

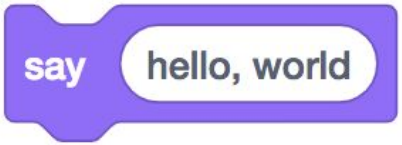
```
clang -o hello hello.c -lcs50

./hello
```

```
python hello.py
```


say
hello, world




```
printf("hello, world\n");
```




```
print("hello, world")
```

ask
What's your name?
and wait
say
join
hello,
answer

```
string answer = get_string("What's your name?\n");
printf("hello, %s\n", answer);
```

```
answer = get_string("What's your name?\n")
print("hello, " + answer)
```

```
answer = get_string("What's your name?\n")
print("hello, " + answer)
```

```
answer = get_string("What's your name?\n")
print("hello, " + answer)
```

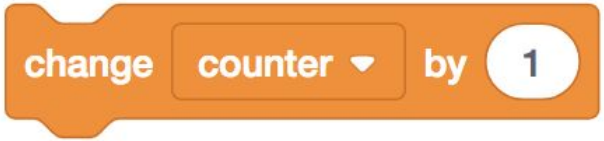
```
answer = get_string("What's your name?\n")
print("hello,", answer)
```

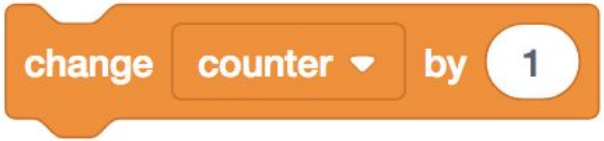
```
answer = get_string("What's your name?\n")
print(f"hello, {answer}")
```

set
counter
to
0

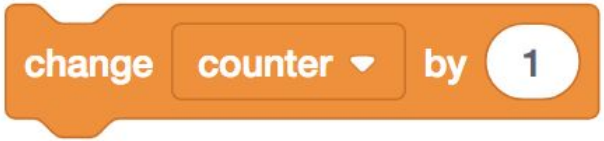
```
int counter = 0;
```

```
counter = 0
```

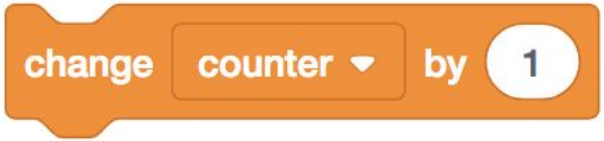

change
counter
by
1



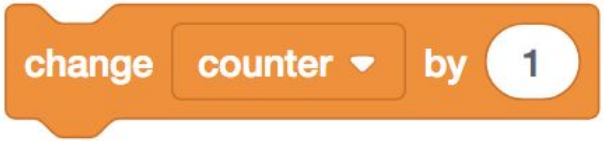

```
counter = counter + 1;
```

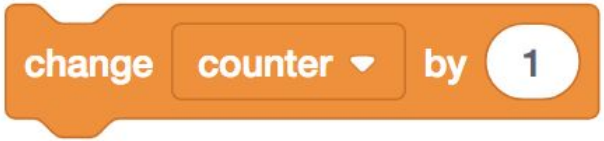



```
counter = counter + 1
```




```
counter += 1;
```


change
counter
by
1

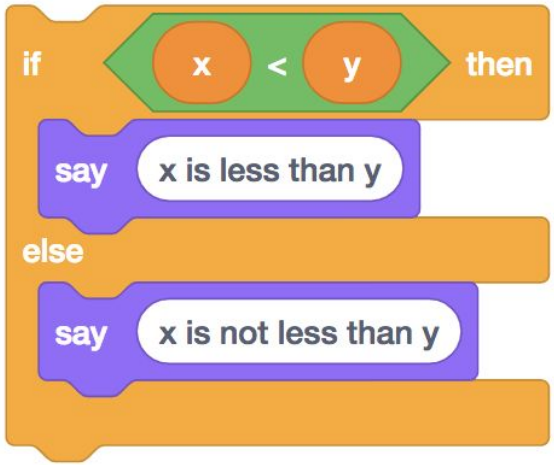


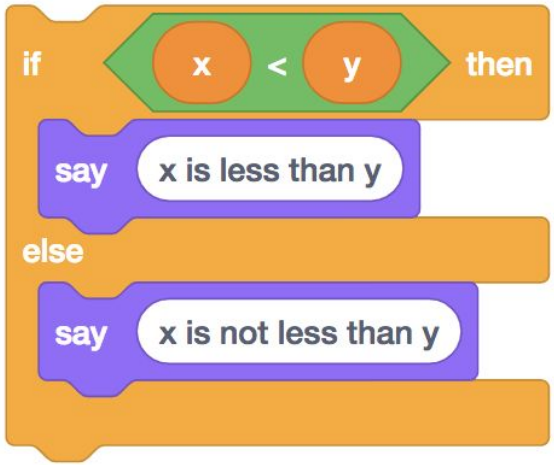

```
counter += 1
```

if
x
<
y
then
say
x is less than y

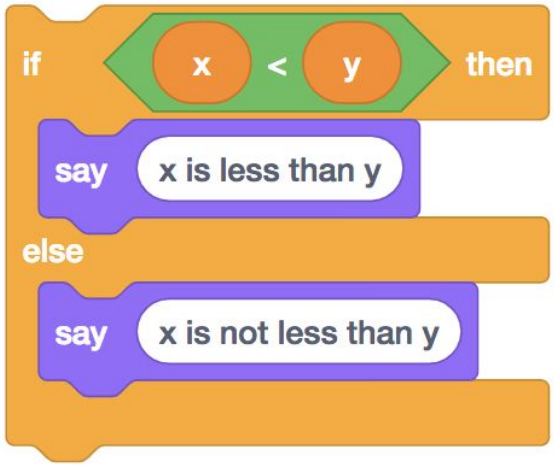
```
if (x < y)
{
    printf("x is less than y\n");
}
```

```
if x < y:
    print("x is less than y")
```

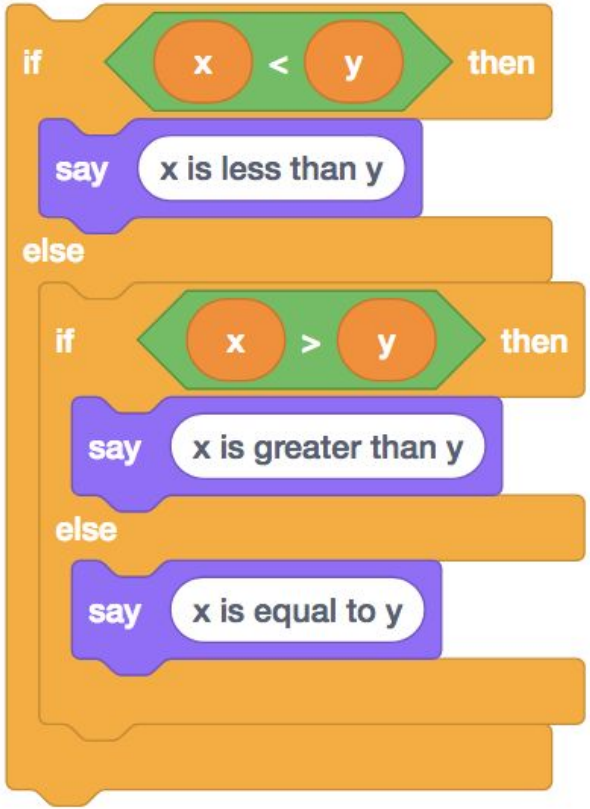

if
x
<
y
then
say
x is less than y
else
say
x is not less than y

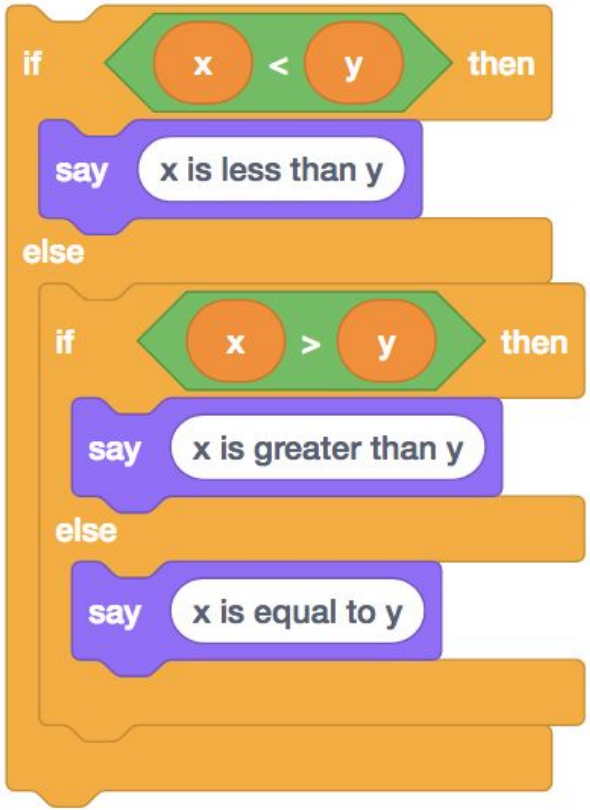



```
if (x < y)
{
    printf("x is less than y\n");
}
else
{
    printf("x is not less than y\n");
}
```

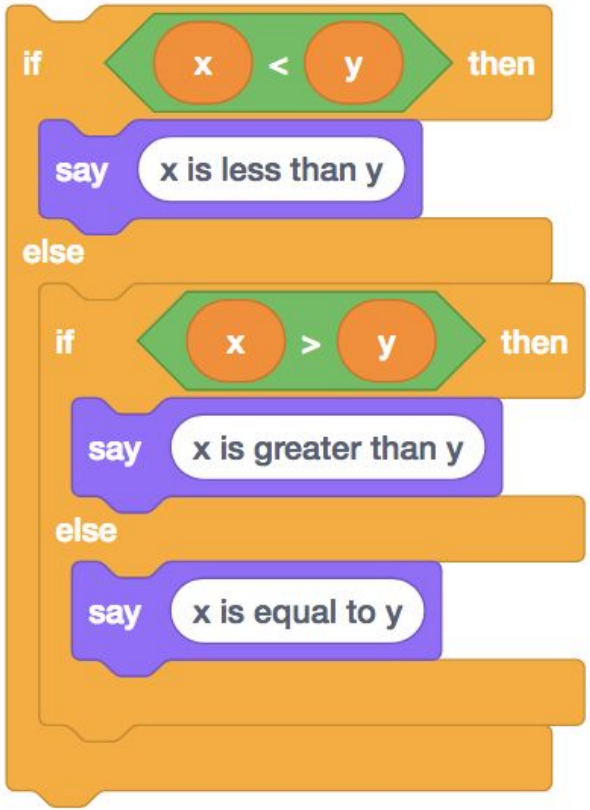



```
if x < y:
    print("x is less than y")
else:
    print("x is not less than y")
```

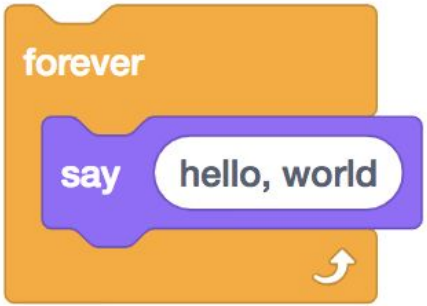

if
x
<
y
then
say
x is less than y
else
if
x
>
y
then
say
x is greater than y
else
say
x is equal to y

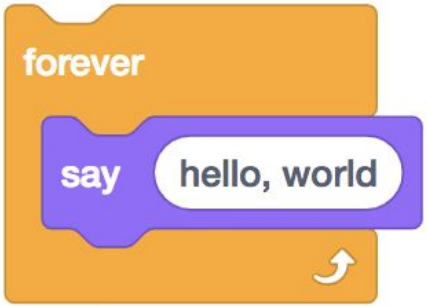



```
if (x < y)
{
    printf("x is less than y\n");
}
else if (x > y)
{
    printf("x is greater than y\n");
}
else
{
    printf("x is equal to y\n");
}
```

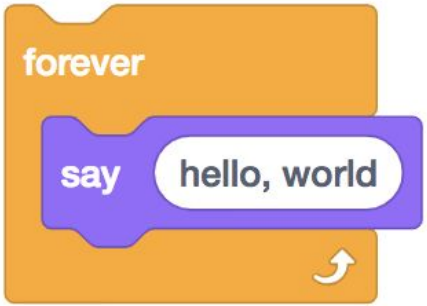



```
if x < y:
    print("x is less than y")
elif x > y:
    print("x is greater than y")
else:
    print("x is equal to y")
```

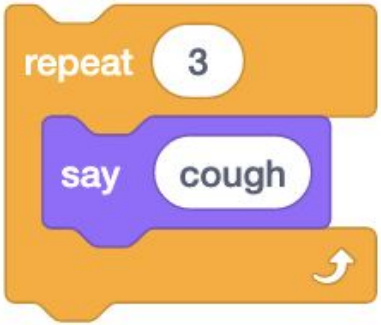

forever
say
hello, world

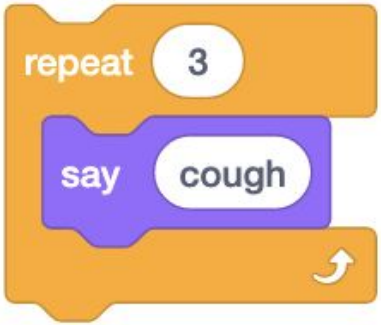



```
while (true)
{
    printf("hello, world\n");
}
```

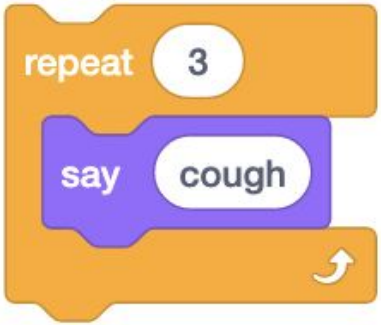



```
while True:
    print("hello, world")
```

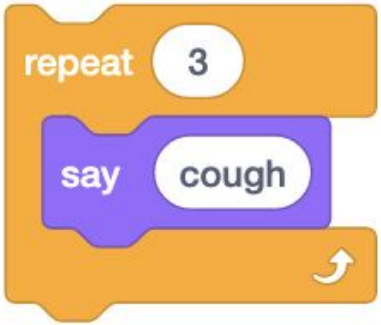

repeat
3
say
cough

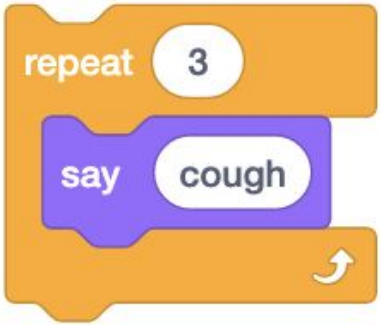



```
int i = 3;
while (i > 0)
{
    printf("cough\n");
    i--;
}
```

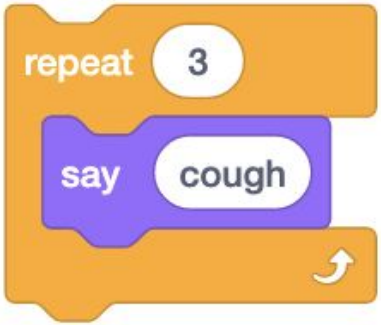



```
i = 3
while i > 0:
    print("cough")
    i -= 1
```

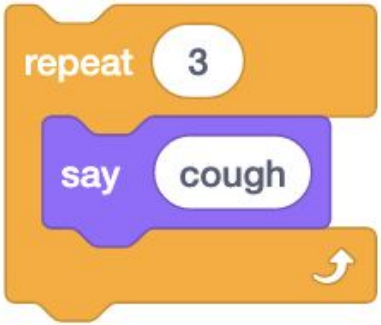

repeat
3
say
cough




```
for (int i = 0; i < 3; i++)
{
    printf("cough\n");
}
```




```
for i in [0, 1, 2]:
    print("cough")
```




```
for i in range(3):
    print("cough")
```

```
bool

char

double

float

int

long

string

...
```

```
bool



float
int


str
...
```

range

list

tuple

dict

set

...

`range` sequence of numbers

`list`

`tuple`

`dict`

`set`

`...`

`range`	sequence of numbers
`list`	sequence of mutable values
`tuple`	
`dict`	
`set`	
`...`	

`range`	sequence of numbers
`list`	sequence of mutable values
`tuple`	sequence of immutable values
`dict`	
`set`	
`...`	

`range`	sequence of numbers
`list`	sequence of mutable values
`tuple`	sequence of immutable values
`dict`	collection of key-value pairs
`set`	
`...`	

`range`	sequence of numbers
`list`	sequence of mutable values
`tuple`	sequence of immutable values
`dict`	collection of key-value pairs
`set`	collection of unique values
`...`	

docs.python.org

```
get_char

get_double

get_float

get_int

get_long

get_string

...
```

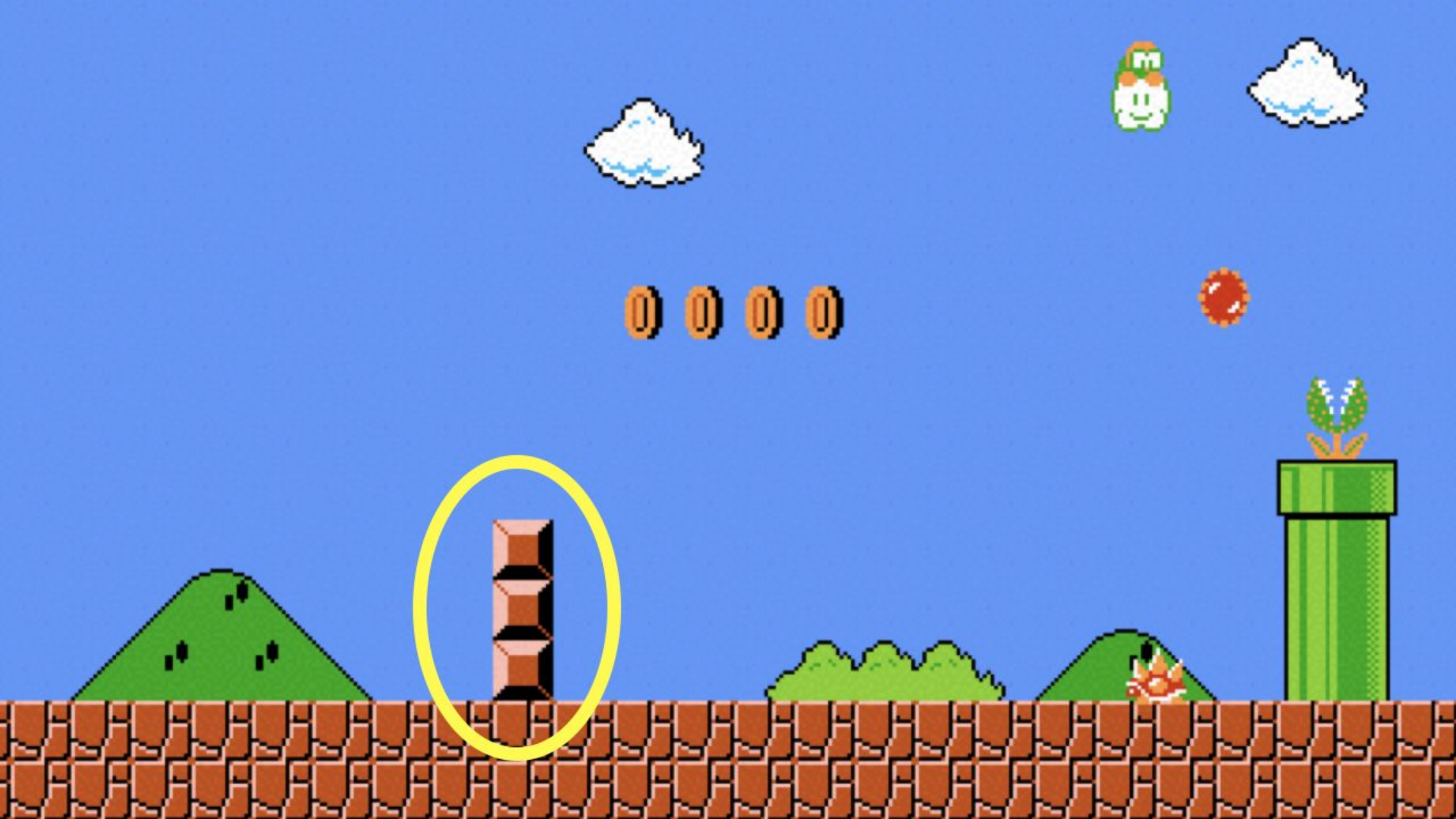
```
get_float

get_int


get_string
```

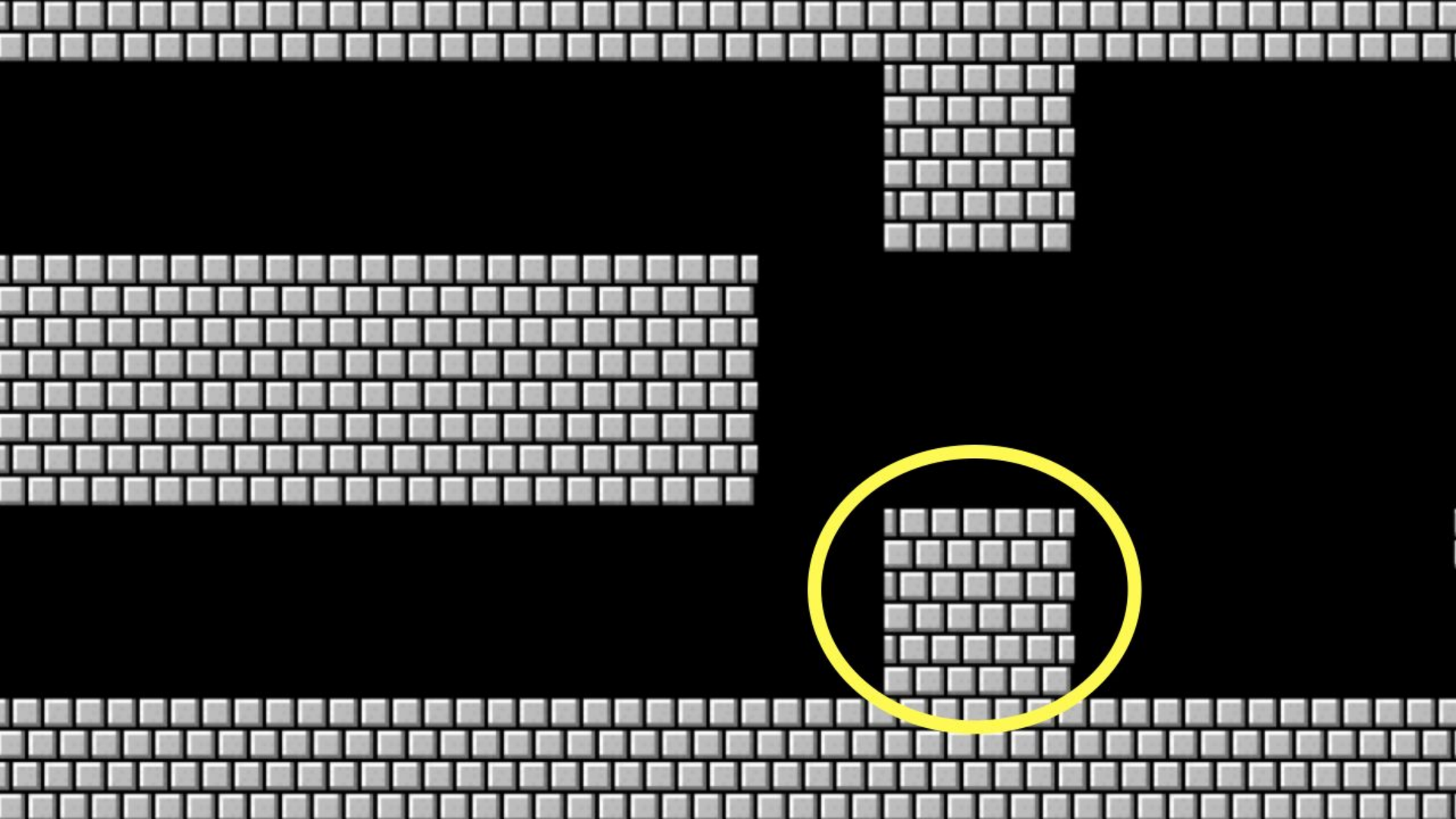
```
#include <cs50.h>
```

```
import cs50
```

```
from cs50 import get_float, get_int, get_string
```

input





floating-point imprecision

integer overflow

~~integer overflow~~

regular expressions

`.`	any character
`.*`	0 or more characters
`.+`	1 or more characters
`?`	optional
`^`	start of input
`$`	end of input

...

This is CS50