

This is CS50.





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computational thinking

inputs → algorithms → outputs

computational thinking

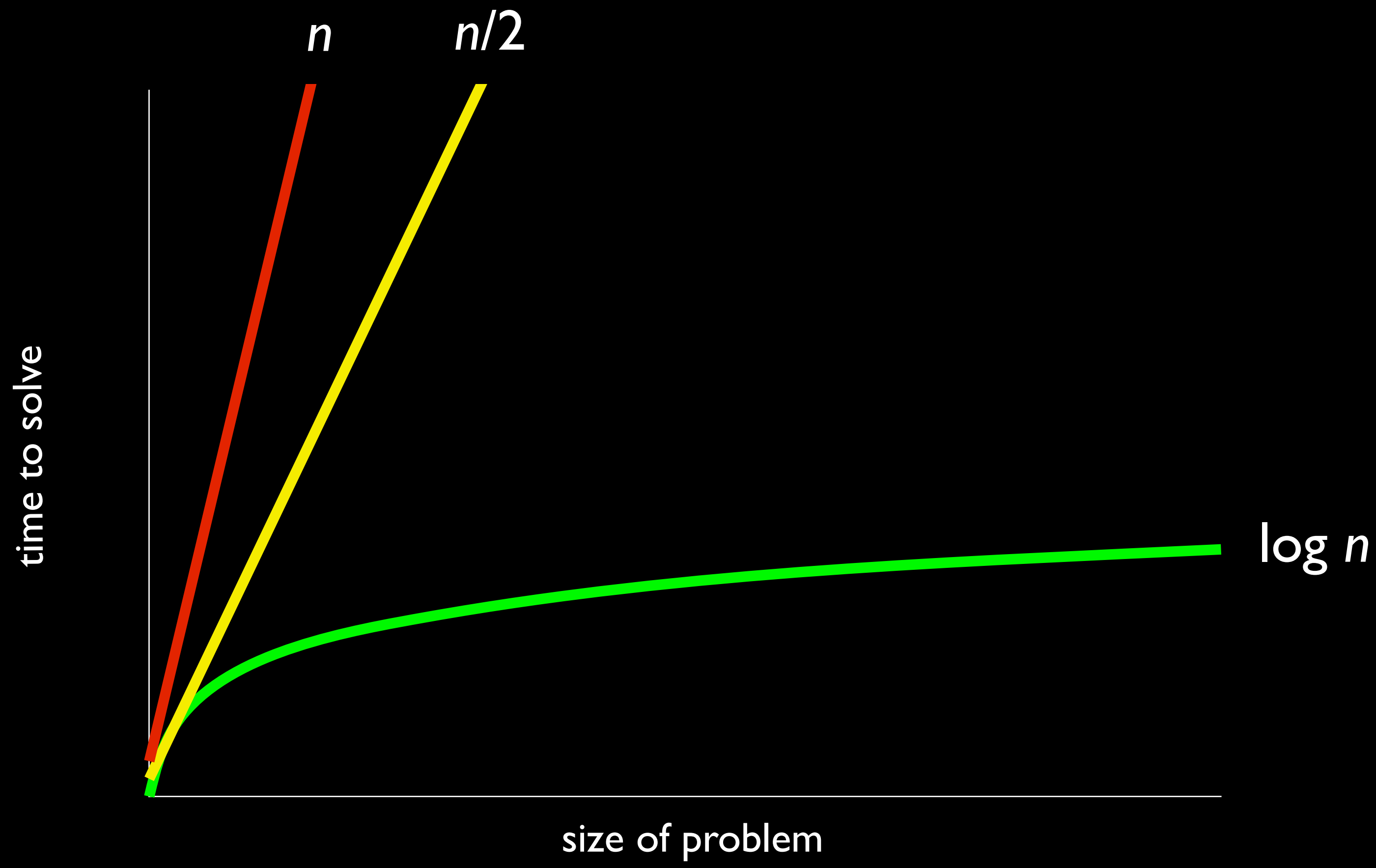
inputs → algorithms → outputs

computational thinking

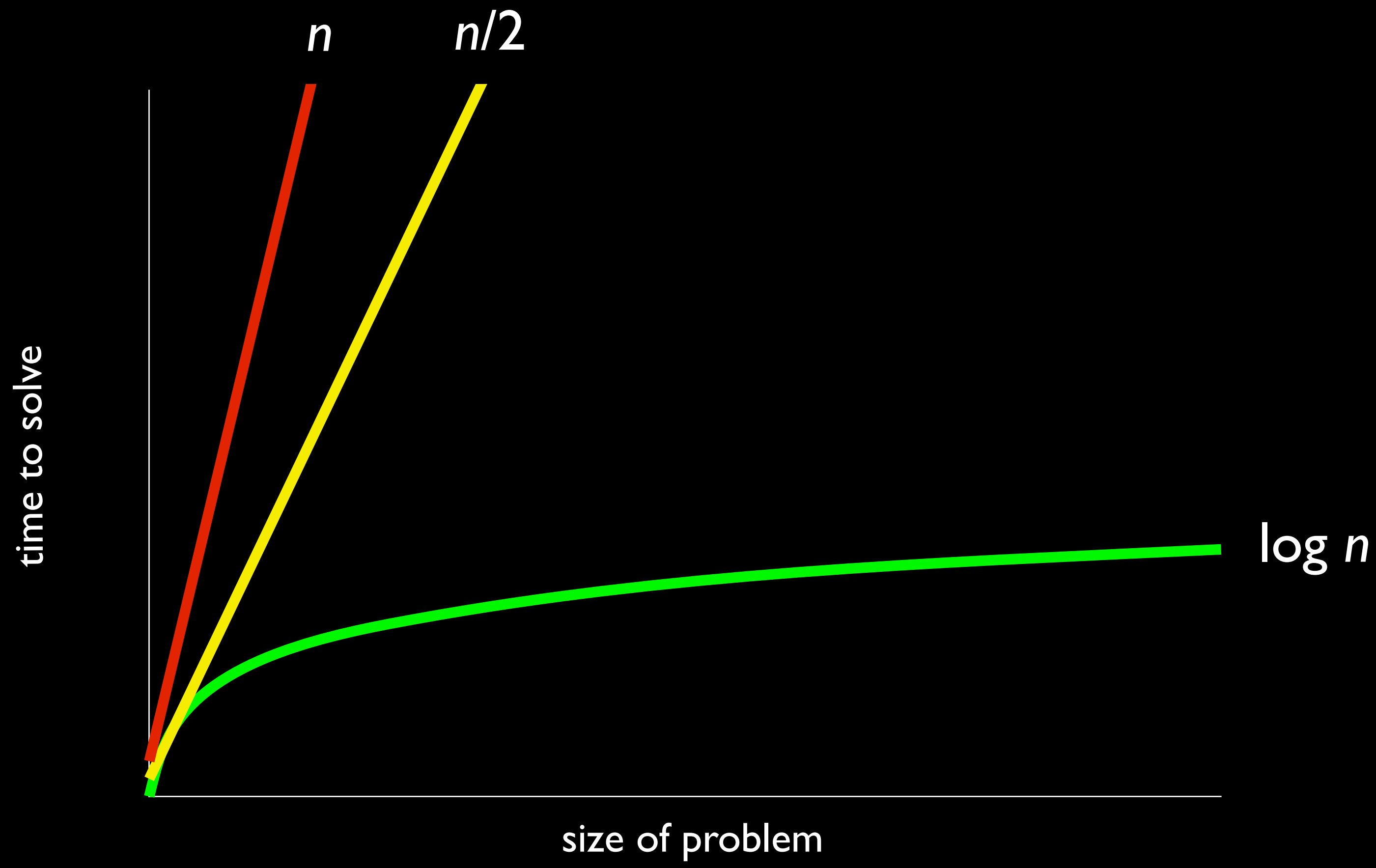
inputs → algorithms → outputs



```
1  pick up phone book
2  open to middle of phone book
3  look at names
4  if "Smith" is among names
5      call Mike
6  else if "Smith" is earlier in book
7      open to middle of left half of book
8      go to line 3
9  else if "Smith" is later in book
10     open to middle of right half of book
11     go to line 3
12 else
13     give up
```



- 1 stand up and assign yourself the number 1
- 2 pair off with someone standing,
add your numbers together,
and adopt the sum as your new number
- 3 one of you should sit down;
the other should go back to step 2







pseudocode

code

source code

```
#include <stdio.h>
```

```
int main(void)
```

```
{
```

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

```
}
```

when  clicked

say hello, world!

statements




statements



statements



Boolean expressions



mouse down?

Boolean expressions



Boolean expressions

touching mouse-pointer ▼ ?

Boolean expressions



conditions



conditions



conditions



loops



loops



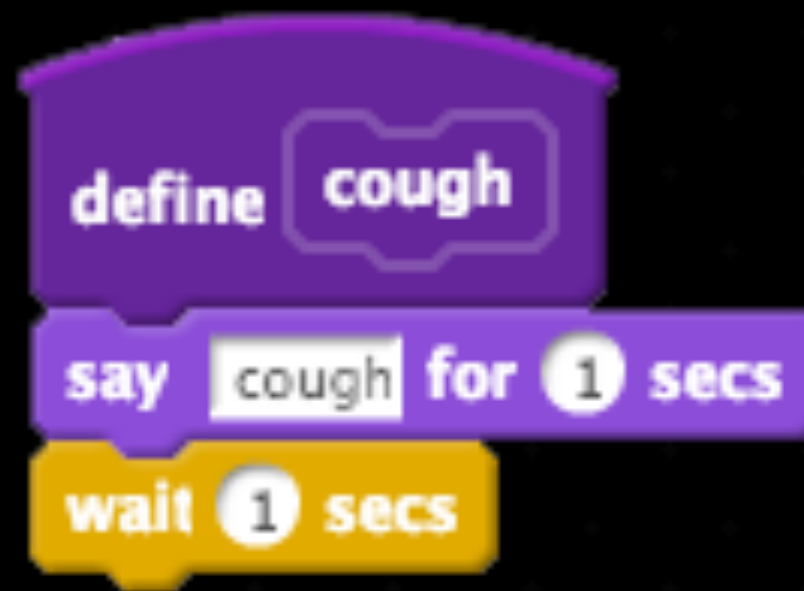
variables



arrays



functions





threads



events



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