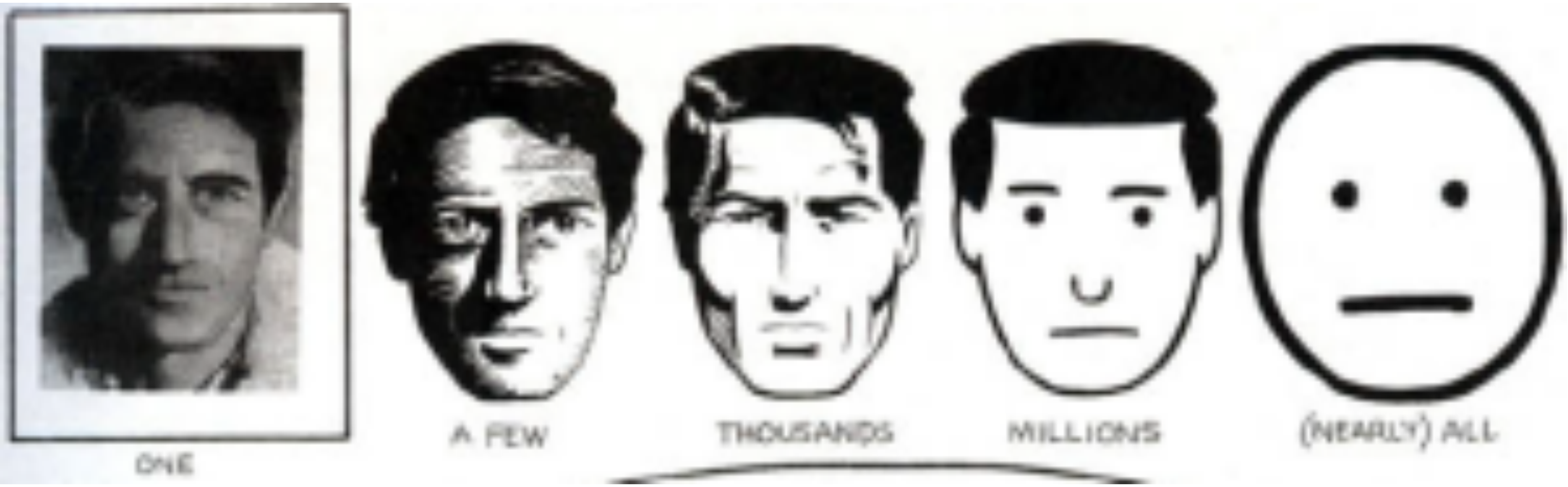
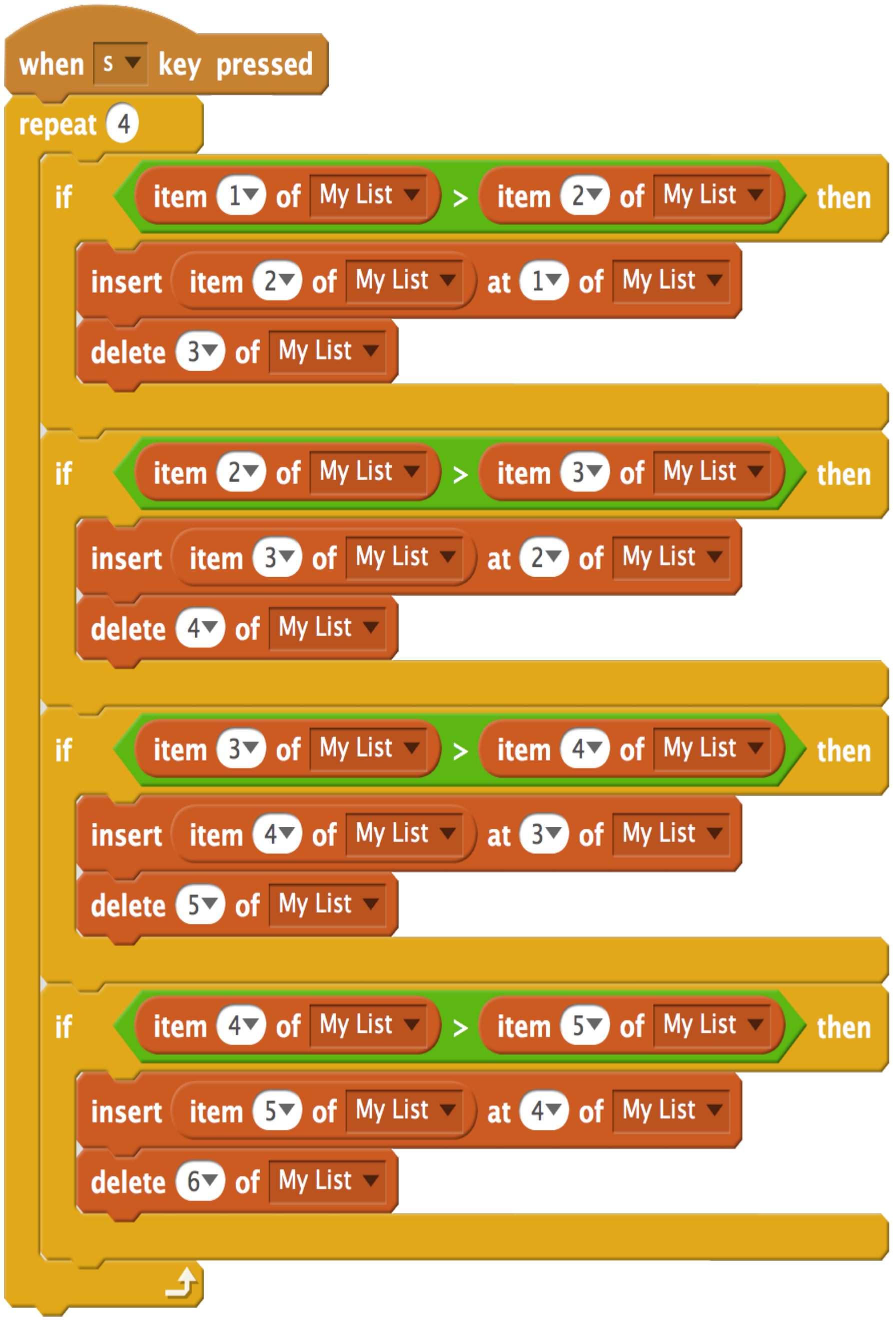


Through the process of **ABSTRACTION**, a programmer hides all but the relevant data about an object in order to reduce complexity and increase efficiency.

Another definition: when you ABSTRACT, you make the code less about the specific case and more about the general case.

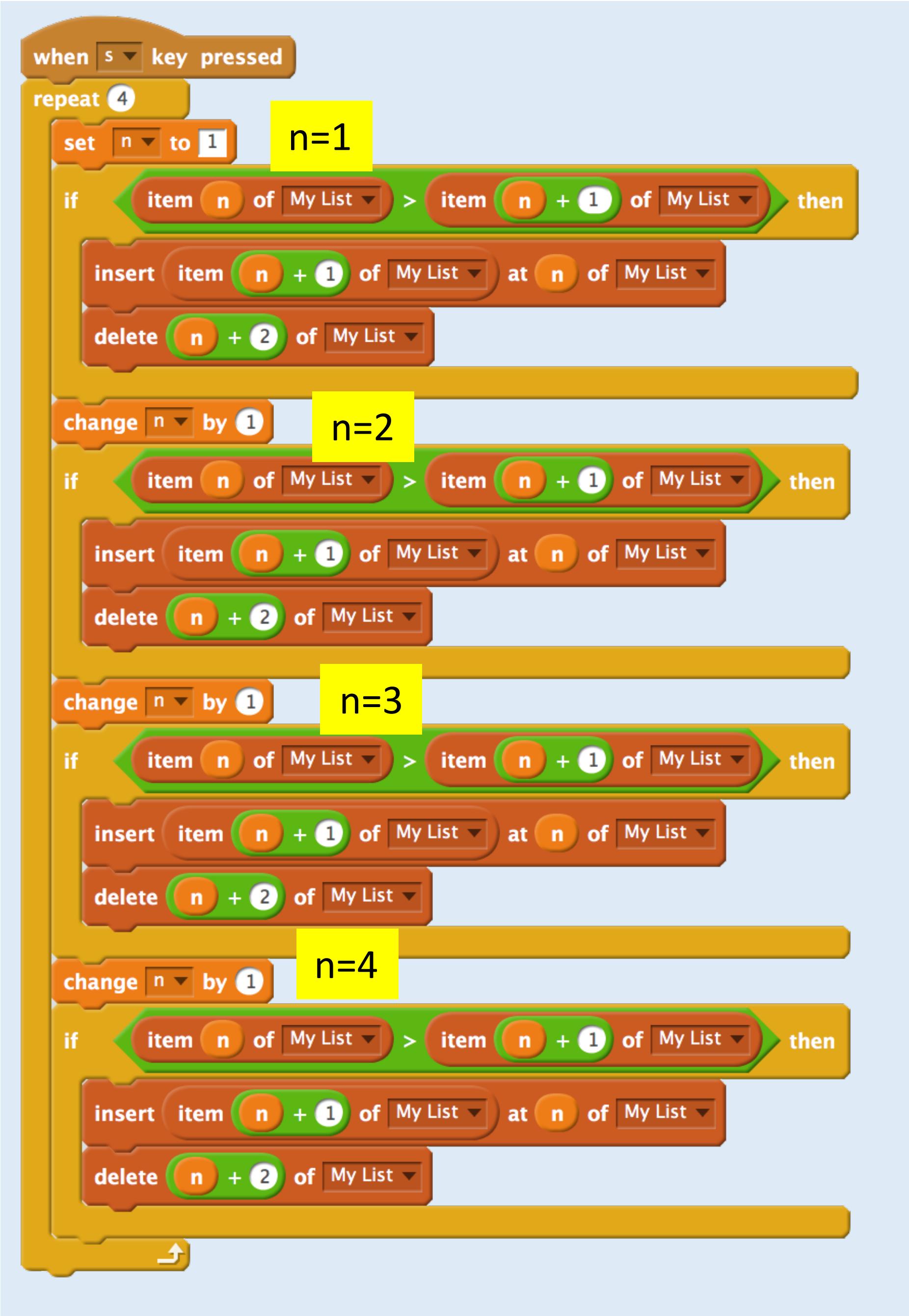
In the same way that ABSTRACTION is used in art, the object that remains is a representation of the original with unwanted detail omitted.

CODING FOR SPECIFIC CASE



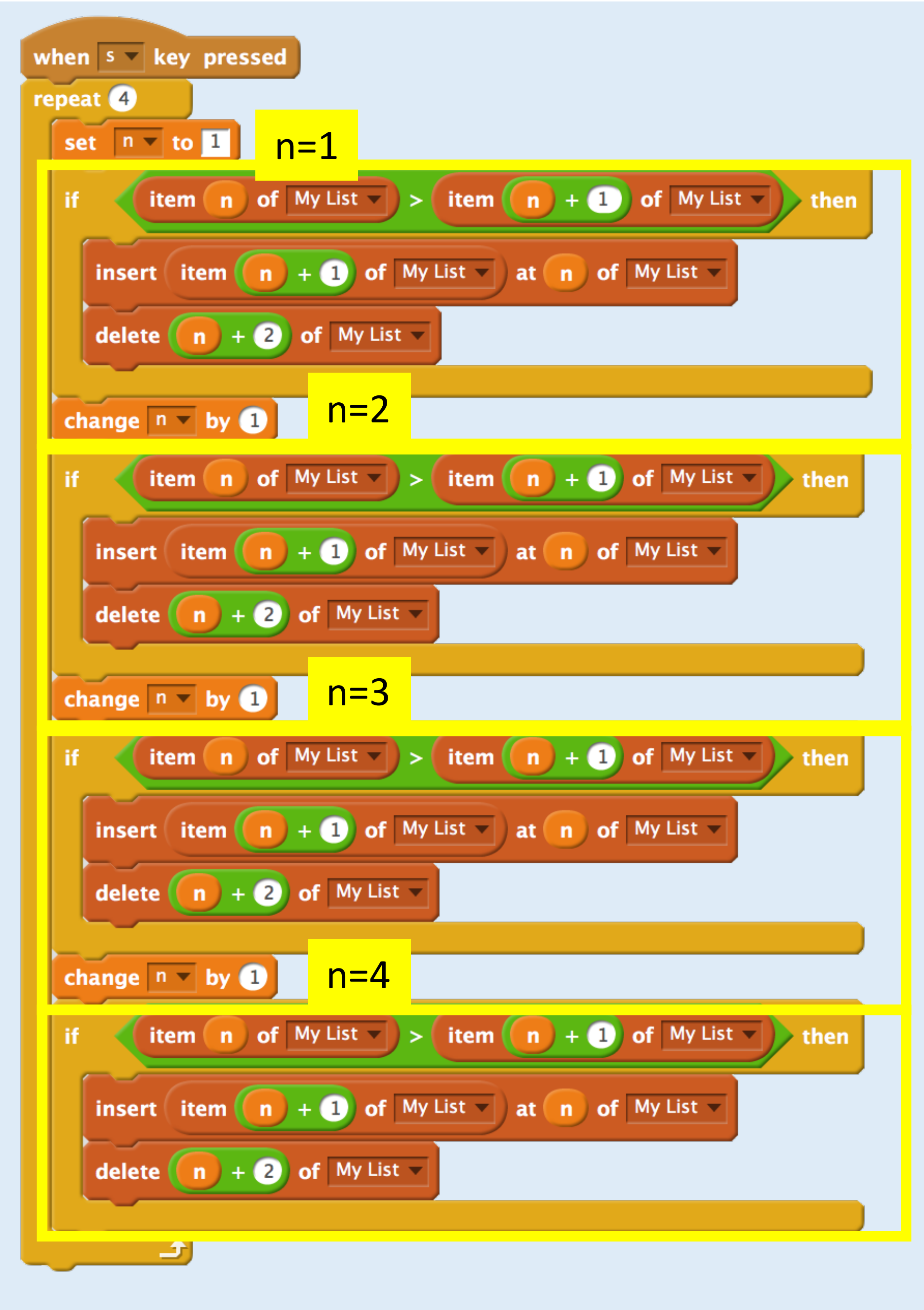
```
when s key pressed
repeat 4
    if item 1 of My List > item 2 of My List then
        insert item 2 of My List at 1 of My List
        delete 3 of My List
    if item 2 of My List > item 3 of My List then
        insert item 3 of My List at 2 of My List
        delete 4 of My List
    if item 3 of My List > item 4 of My List then
        insert item 4 of My List at 3 of My List
        delete 5 of My List
    if item 4 of My List > item 5 of My List then
        insert item 5 of My List at 4 of My List
        delete 6 of My List
```

BEGINNING TO ABSTRACT



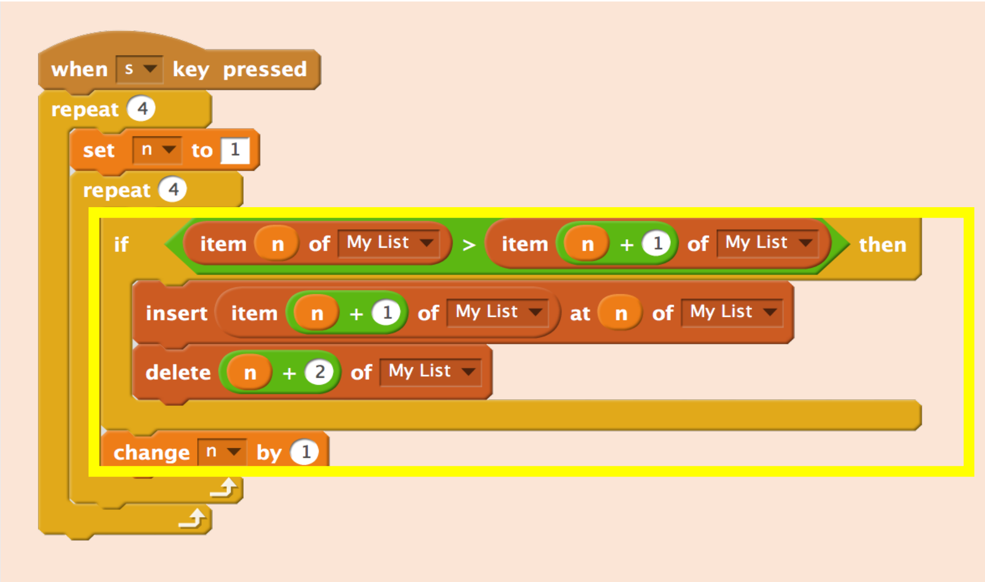
```
when s key pressed
repeat 4
    set n to 1
    if item n of My List > item n + 1 of My List then
        insert item n + 1 of My List at n of My List
        delete n + 2 of My List
    change n by 1
    if item n of My List > item n + 1 of My List then
        insert item n + 1 of My List at n of My List
        delete n + 2 of My List
    change n by 1
    if item n of My List > item n + 1 of My List then
        insert item n + 1 of My List at n of My List
        delete n + 2 of My List
    change n by 1
    if item n of My List > item n + 1 of My List then
        insert item n + 1 of My List at n of My List
        delete n + 2 of My List
```

BEGINNING TO ABSTRACT (from previous)



```
when s key pressed
repeat 4
  set n to 1
  if item n of My List > item n + 1 of My List then
    insert item n + 1 of My List at n of My List
    delete n + 2 of My List
  change n by 1
  if item n of My List > item n + 1 of My List then
    insert item n + 1 of My List at n of My List
    delete n + 2 of My List
  change n by 1
  if item n of My List > item n + 1 of My List then
    insert item n + 1 of My List at n of My List
    delete n + 2 of My List
  change n by 1
  if item n of My List > item n + 1 of My List then
    insert item n + 1 of My List at n of My List
    delete n + 2 of My List
```

ABSTRACTED



```
when s key pressed
repeat 4
  set n to 1
  repeat 4
    if item n of My List > item n + 1 of My List then
      insert item n + 1 of My List at n of My List
      delete n + 2 of My List
    change n by 1
```