

Entering Input

At the R prompt we type expressions. The `<-` symbol is the assignment operator.

```
> x <- 1
> print(x)
[1] 1
> x
[1] 1
> msg <- "hello"
```

The grammar of the language determines whether an expression is complete or not.

```
> x <- ## Incomplete expression
```

The `#` character indicates a comment. Anything to the right of the `#` (including the `#` itself) is ignored.

Evaluation

When a complete expression is entered at the prompt, it is evaluated and the result of the evaluated expression is returned. The result may be auto-printed.

```
> x <- 5 ## nothing printed  
> x      ## auto-printing occurs  
[1] 5  
> print(x) ## explicit printing  
[1] 5
```

The `[1]` indicates that `x` is a vector and `5` is the first element.

Printing

```
> x <- 1:20  
> x  
[1] 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15  
[16] 16 17 18 19 20
```

The `:` operator is used to create integer sequences.