

## Some List methods and usages

What it is	What it does
List() or Nil	The empty List
List("Cool", "tools", "rule")	Creates a new List[String] with the three values "Cool", "tools", and "rule"
val thrill = "Will" :: "fill" :: "until" :: Nil	Creates a new List[String] with the three values "Will", "fill", and "until"
List("a", "b") :: List("c", "d")	Concatenates two lists (returns a new List[String] with values "a", "b", "c", and "d")
thrill(2)	Returns the element at index 2 (zero based) of the thrill list (returns "until")
thrill.count(s => s.length == 4)	Counts the number of string elements in thrill that have length 4 (returns 2)
thrill.drop(2)	Returns the thrill list without its first 2 elements (returns List("until"))
thrill.dropRight(2)	Returns the thrill list without its rightmost 2 elements (returns List("Will"))
thrill.exists(s => s == "until")	Determines whether a string element exists in thrill that has the value "until" (returns true)
thrill.filter(s => s.length == 4)	Returns a list of all elements, in order, of the thrill list that have length 4 (returns List("Will", "fill"))
thrill.forall(s => s.endsWith("l"))	Indicates whether all elements in the thrill list end with the letter "l" (returns true)
thrill.foreach(s => print(s))	Executes the print statement on each of the strings in the thrill list (prints "Willfilluntil")
thrill.foreach(print)	Same as the previous, but more concise (also prints "Willfilluntil")
thrill.head	Returns the first element in the thrill list (returns "Will")
thrill.init	Returns a list of all but the last element in the thrill list (returns List("Will", "fill"))
thrill.isEmpty	Indicates whether the thrill list is empty (returns false)
thrill.last	Returns the last element in the thrill list (returns "until")
thrill.length	Returns the number of elements in the thrill list (returns 3)
thrill.map(s => s + "y")	Returns a list resulting from adding a "y" to each string element in the thrill list (returns List("Willy", "filly", "untily"))
thrill.mkString(", ")	Makes a string with the elements of the list (returns "Will, fill, until")
thrill.filterNot(s => s.length == 4)	Returns a list of all elements, in order, of the thrill list <i>except those</i> that have length 4 (returns List("until"))
thrill.reverse	Returns a list containing all elements of the thrill list in reverse order (returns List("until", "fill", "Will"))
thrill.sort((s, t) => s.charAt(0).toLowerCase < t.charAt(0).toLowerCase)	Returns a list containing all elements of the thrill list in alphabetical order of the first character lowercased (returns List("fill", "until", "Will"))
thrill.tail	Returns the thrill list minus its first element (returns List("fill", "until"))