

# unknownR

**Helps you discover functions in R that you didn't know you didn't know.**

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# Motivation

Very often we hear, for example :

- " I only recently discovered with() "
- " I didn't know unlist() "
- " I wish I knew all.vars() earlier "
- " I missed vapply() when it was added to R "
- " I never knew there were 8 apply functions! "

# Current tools

- Read R's documentation
- Cheat sheets and reference cards
- Looking at other people's code
- Asking others to review your code
- Training courses

How do you know you covered everything?

How do you keep up to date?

# You said 8 apply functions?

Yes.

```
> objects("package:base", pattern="apply")  
[1] "apply"    "eapply"   "lapply"   "mapply"  
[5] "rapply"   "sapply"   "tapply"   "vapply"
```

But, we knew we didn't know

i.e. we knew to search for pattern "apply"

# Bad news

```
> length(objects("package:base"))
```

```
[1] 1167
```

```
> length(objects("package:utils"))
```

```
[1] 183
```

1,350 is a lot of objects

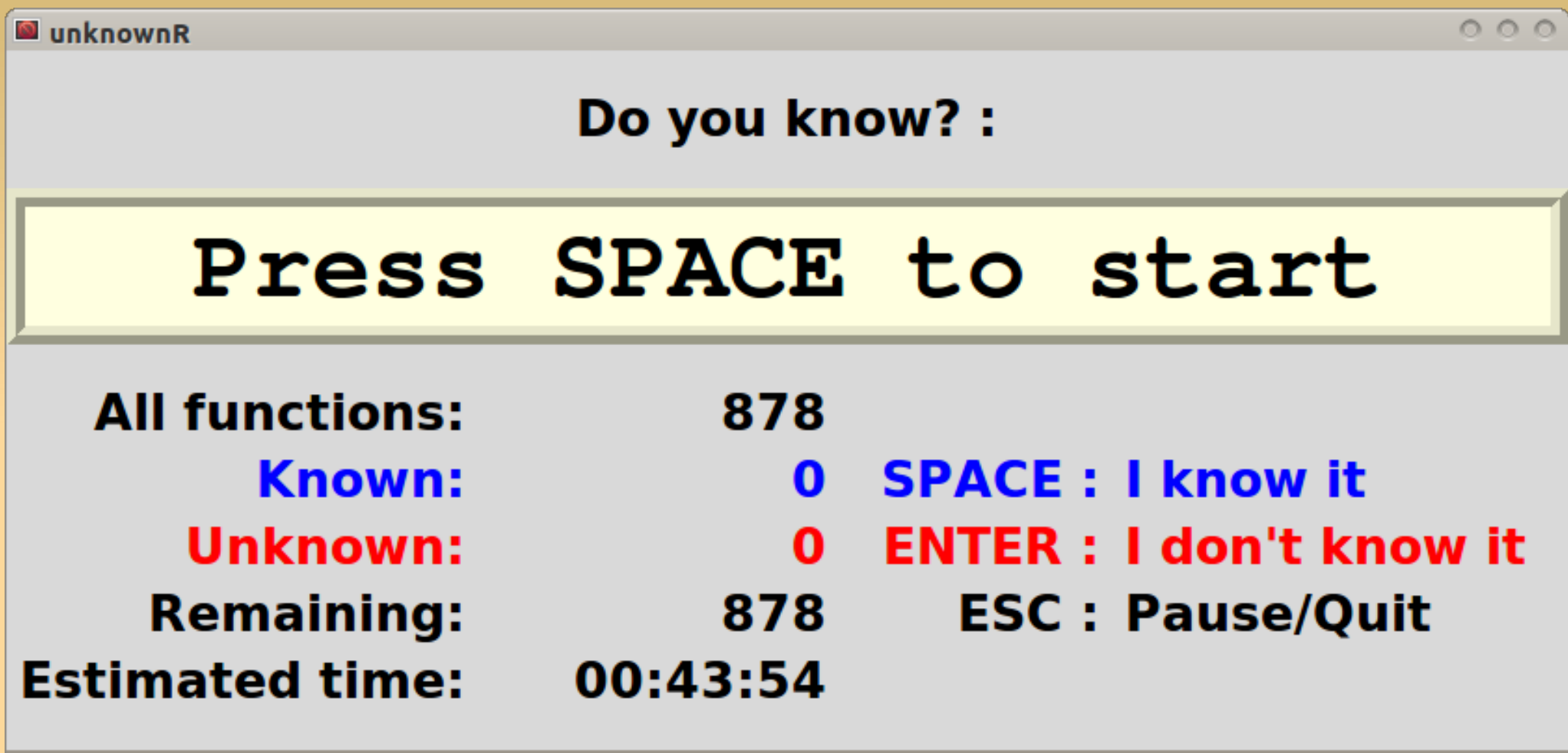
# Filter the 1,350

Remove :

- functions marked `.Defunct`
- `as.*` methods (111)
- other methods (e.g. `Summary.*`)
- assignment functions (e.g. `"names<-"`)

1,350 reduced to 878

# unk ( )



unknownR

Do you know? :

**Press SPACE to start**

<b>All functions:</b>	<b>878</b>	
<b>Known:</b>	<b>0</b>	<b>SPACE : I know it</b>
<b>Unknown:</b>	<b>0</b>	<b>ENTER : I don't know it</b>
<b>Remaining:</b>	<b>878</b>	<b>ESC : Pause/Quit</b>
<b>Estimated time:</b>	<b>00:43:54</b>	

Estimate assumes 3 sec \* 878 (you may be faster!)

**Demo**



# ~/knowns.Rdata

- You don't have to complete `unk ( )` in one sitting e.g. take 10 minutes a day, for 4 days.
- When you upgrade (e.g. from **R** 2.12.1 to 2.12.2) run `unk ( )` again, only the new functions added to **R** will be presented.

# learn()

- `unk()` is supposed to be **quick**. Don't dwell on each function (however intriguing it might look!)
- Output : character vector `tolearn`
- Then run `learn()` to display `help()` for each function. Press ENTER to view next page.
- Rerun `unk()` when you know them.

# Cross platform

- Of course!
- Just Tcl/Tk in standard R
- Linux, Mac and Windows

# Feedback please, thank you

The screenshot shows the R-Forge tracker interface for the 'unknownR' project. The browser address bar displays the URL: [https://r-forge.r-project.org/tracker/?atid=3444&group\\_id=867&func=browse](https://r-forge.r-project.org/tracker/?atid=3444&group_id=867&func=browse). The page header includes the R-Forge logo, a search bar with 'Feature Requests' selected, and links for 'Advanced search', 'Log In', and 'New Account'. Navigation buttons for 'Home', 'My Page', 'Project Tree', and 'unknownR' are visible. Below these are tabs for 'Summary', 'Activity', 'Tracker', 'Lists', 'SCM', and 'R Packages'. The main content area is titled 'Feature Requests: Browse | Download .csv'. It includes filters for 'Assignee' (Unassigned), 'Status' (Open), and 'Order by' (ID, Ascending). A 'Quick Browse' button is also present. The table below lists three feature requests:

ID	Summary	Open Date	Priority	Assigned to	Submitted by
1042	<a href="#">Include top 30(?) packages from Crantastic</a>	* 2010-08-27 11:05	3	Nobody	Matthew Dowle
1046	<a href="#">learn() needs to drive a single browser window</a>	* 2010-08-29 14:22	3	Nobody	Matthew Dowle
1318	<a href="#">Undo button</a>	2011-03-08 00:17	3	Nobody	Matthew Dowle

1 \* Denotes requests > 30 Days Old