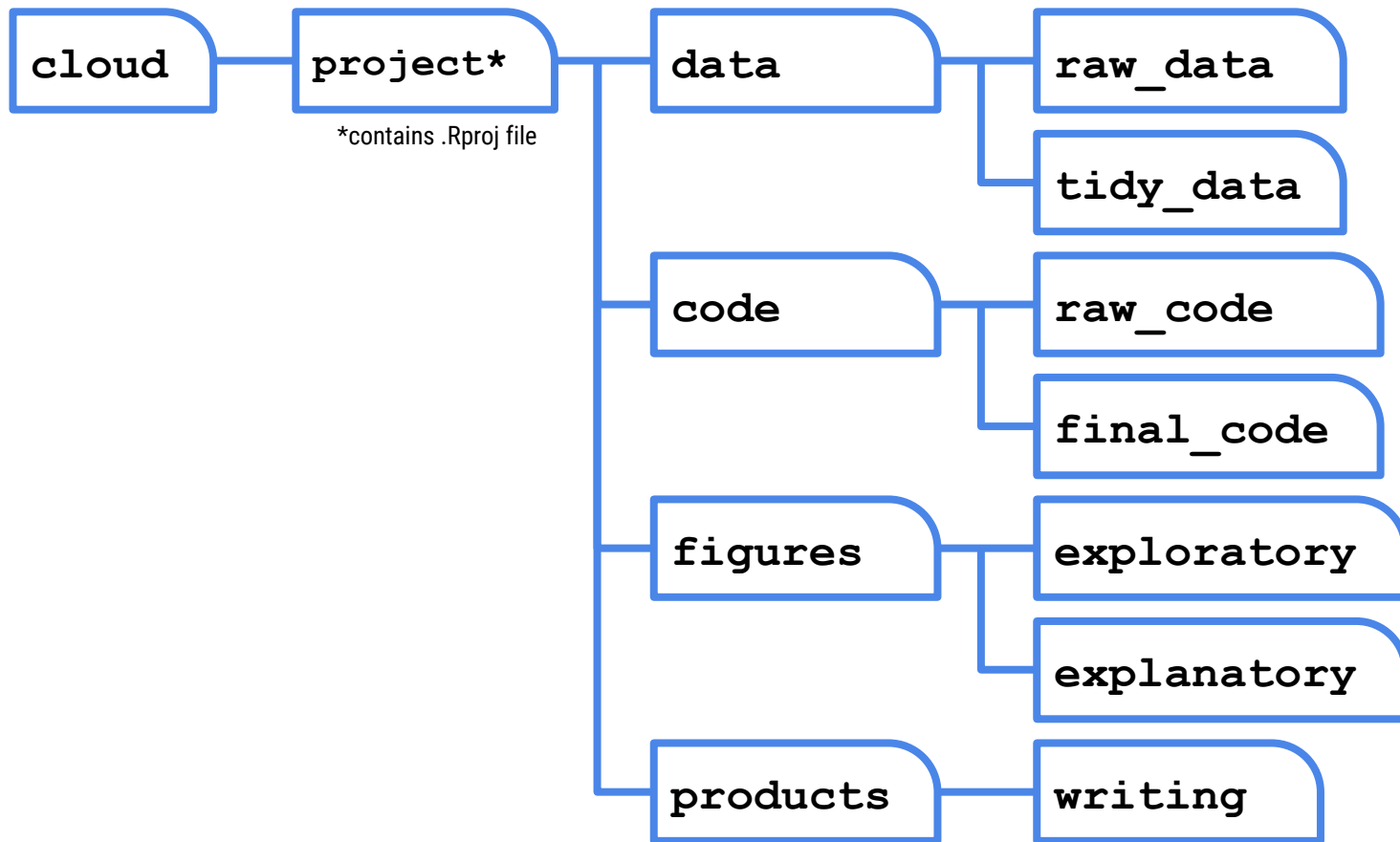
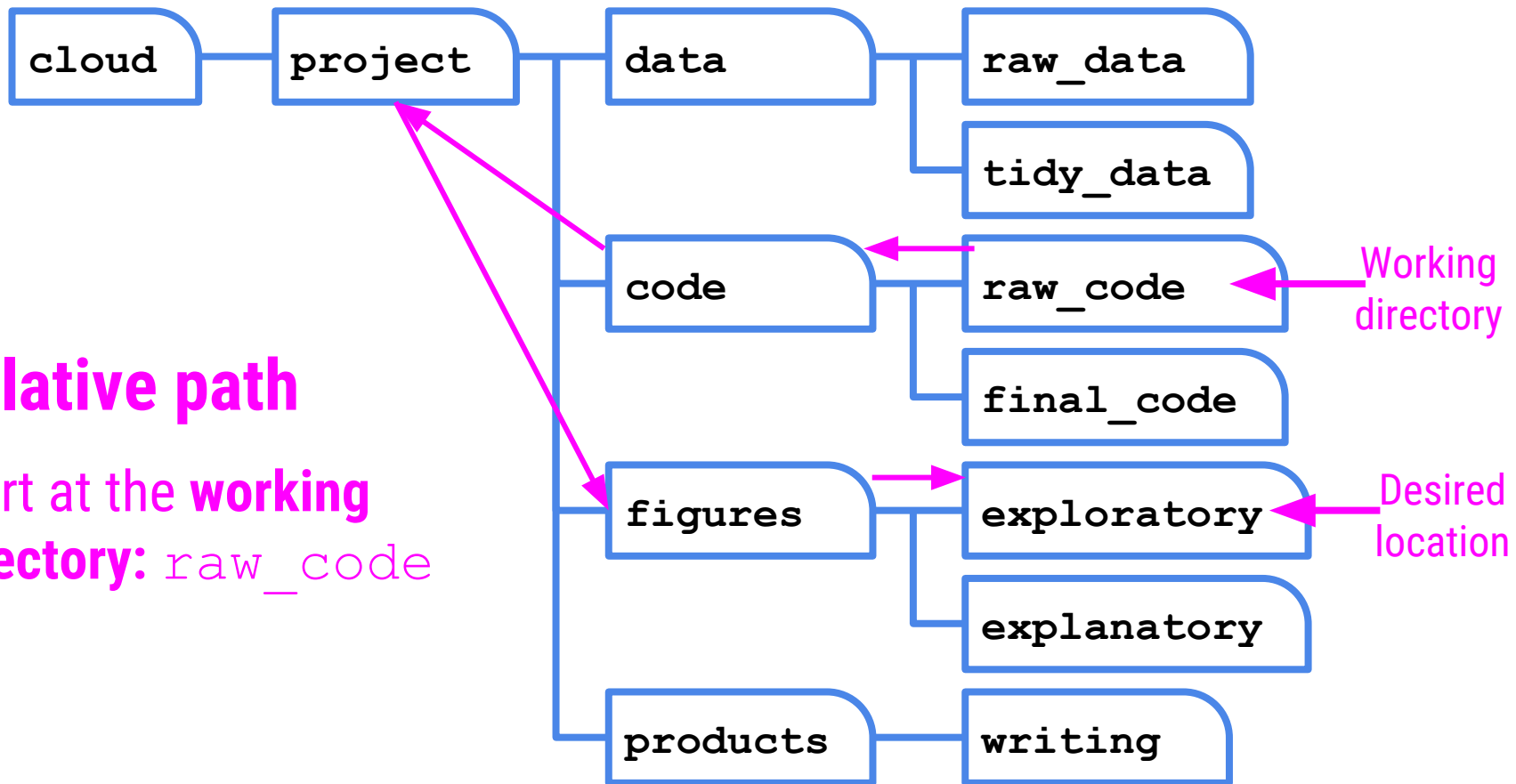


# Using Paths in Code



File Organizing Data Science Projects



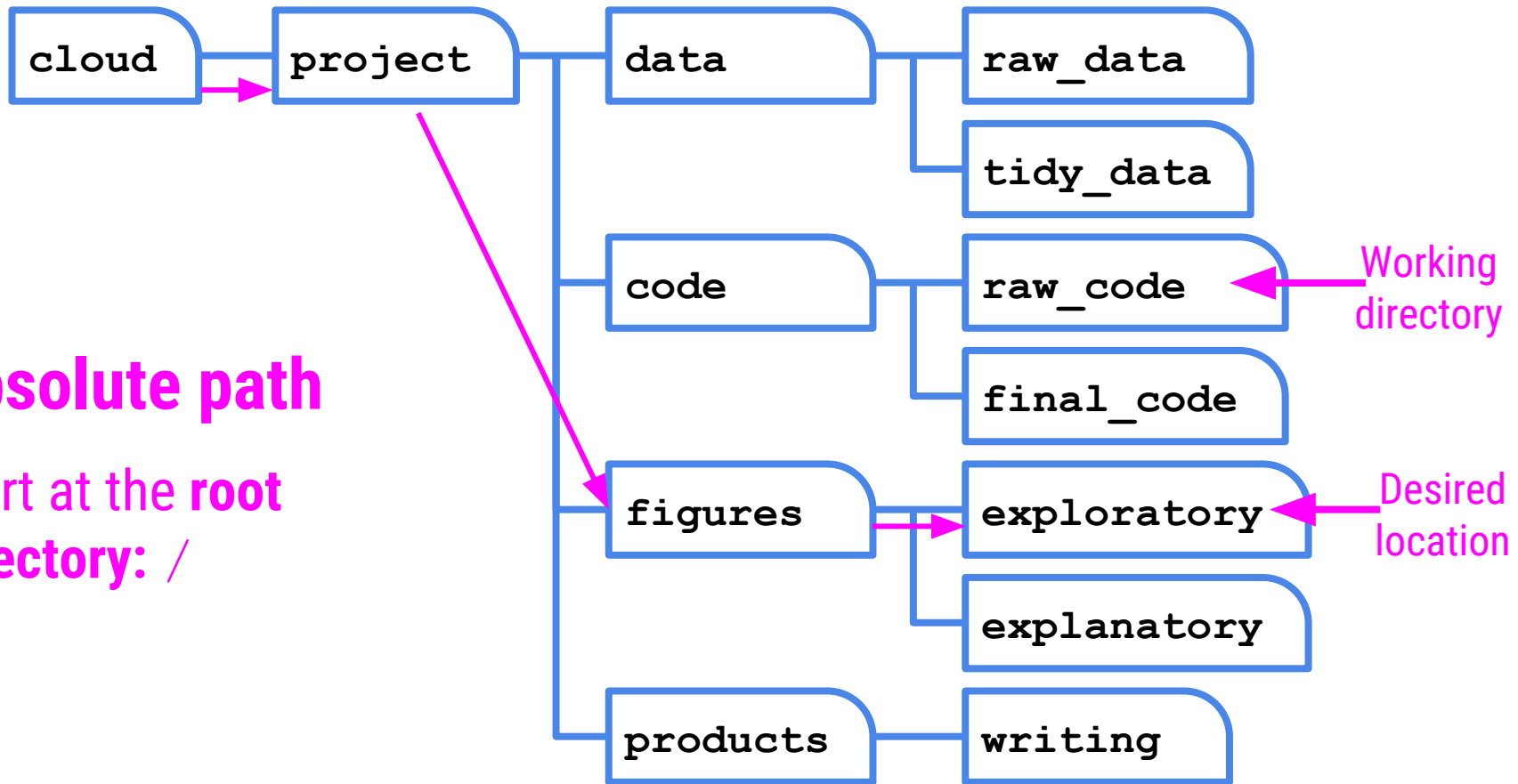


## Relative path

Start at the **working directory**: `raw_code`

To specify this *relative* path: `../../figures/exploratory`





## Absolute path

Start at the **root**  
directory: /

To specify this *absolute* path: /cloud/project/figures/exploratory/

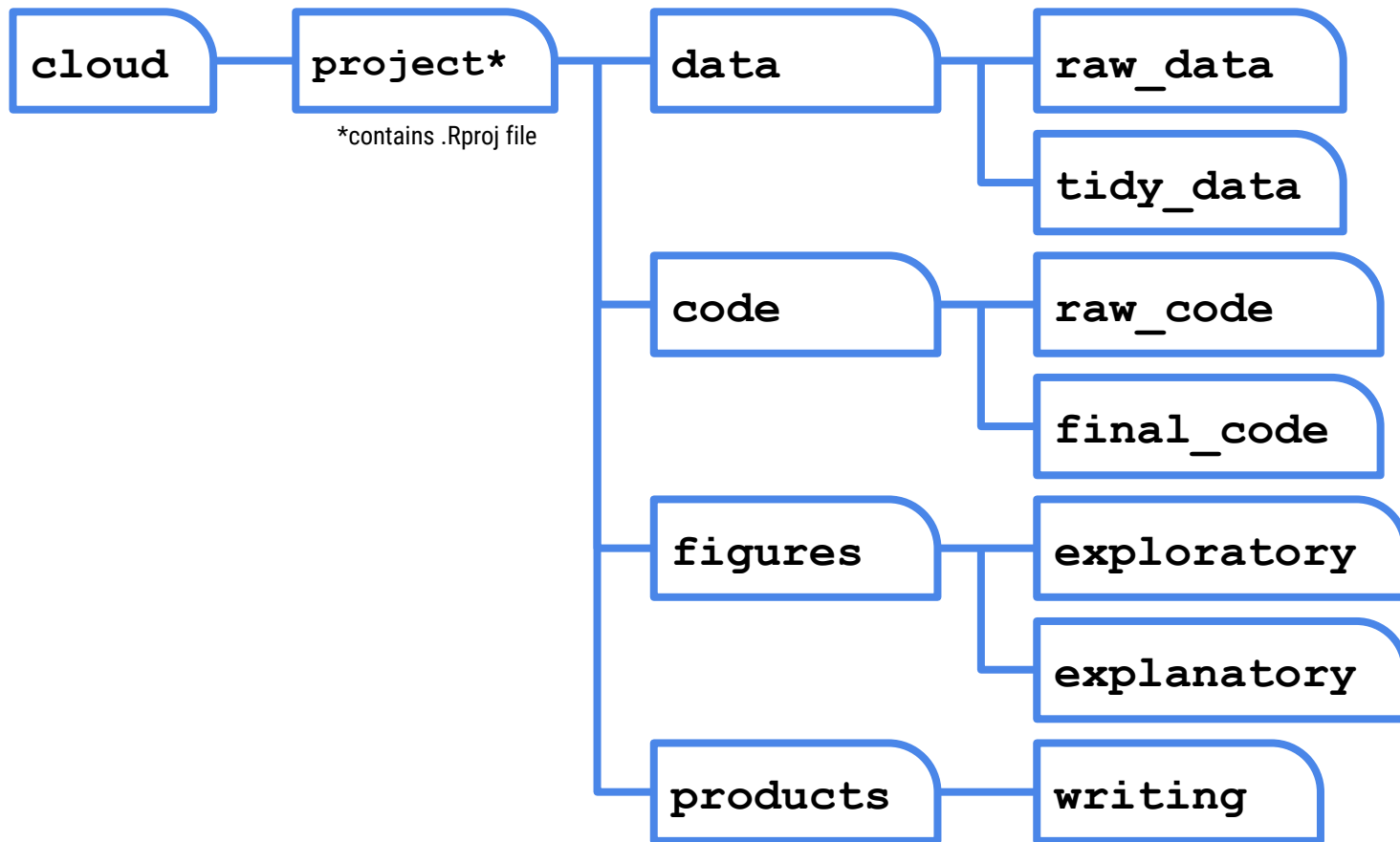


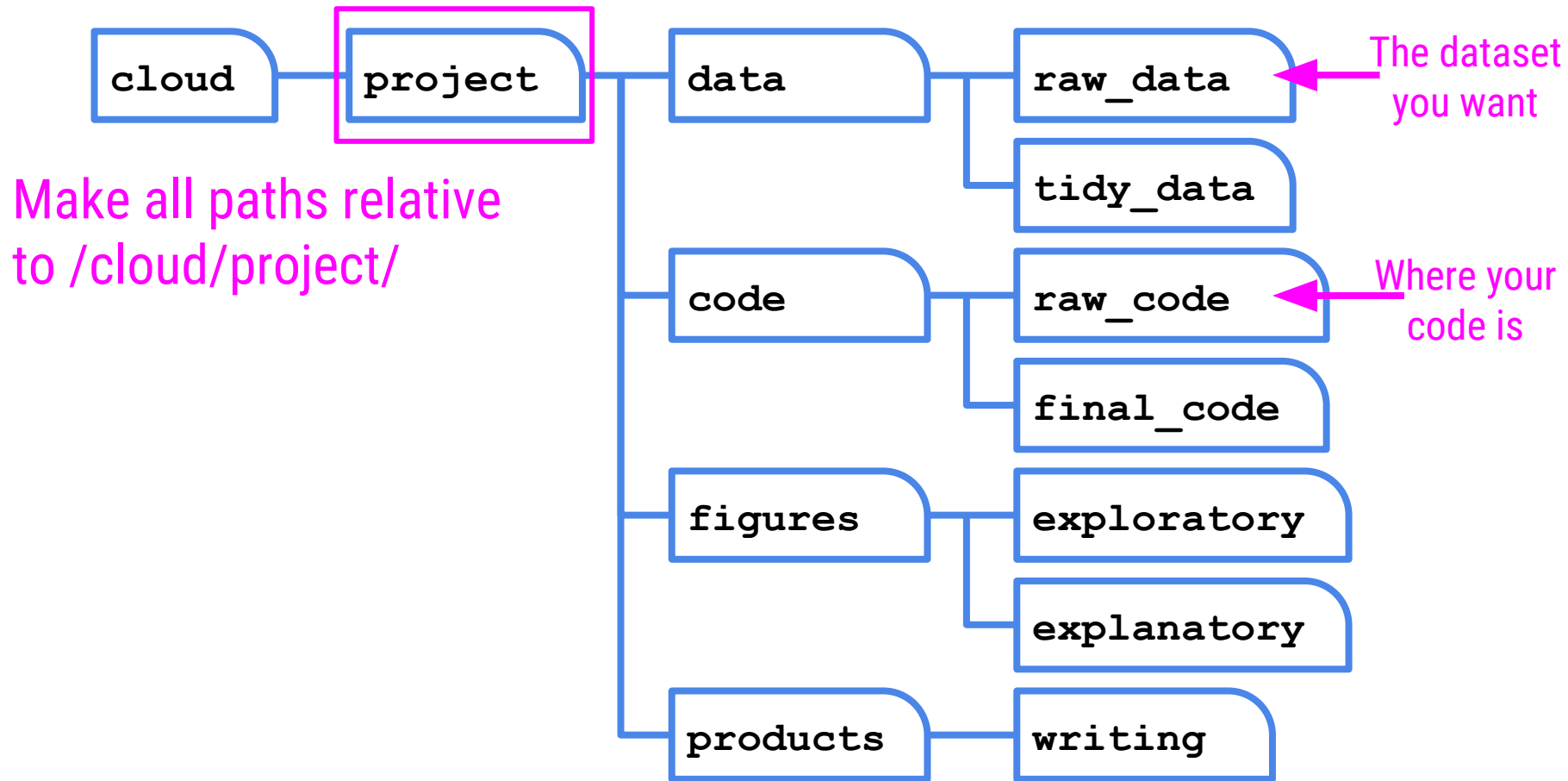
	In the Terminal	In town
<b>Root directory</b>	/	Town square
<b>Working directory</b>	raw_code	Library
<b>Destination</b>	exploratory	Bakery

**Absolute path:** “We’re at the library but pretend you are at the town square. Turn left, then right.”

**Relative path:** “Turn right, then right again.”



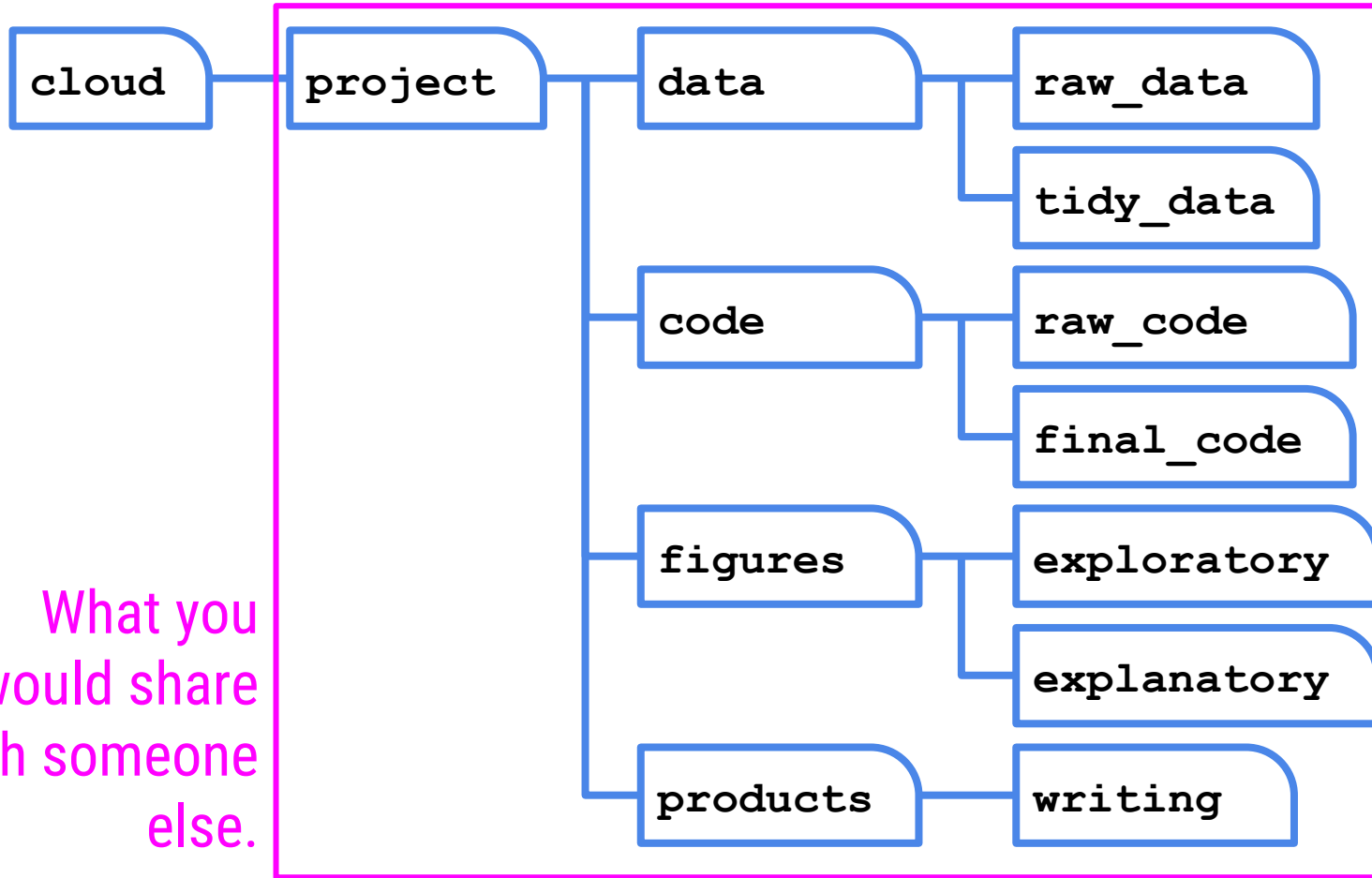




To specify relative path to raw\_data: `data/raw_data/dataset.csv`

---

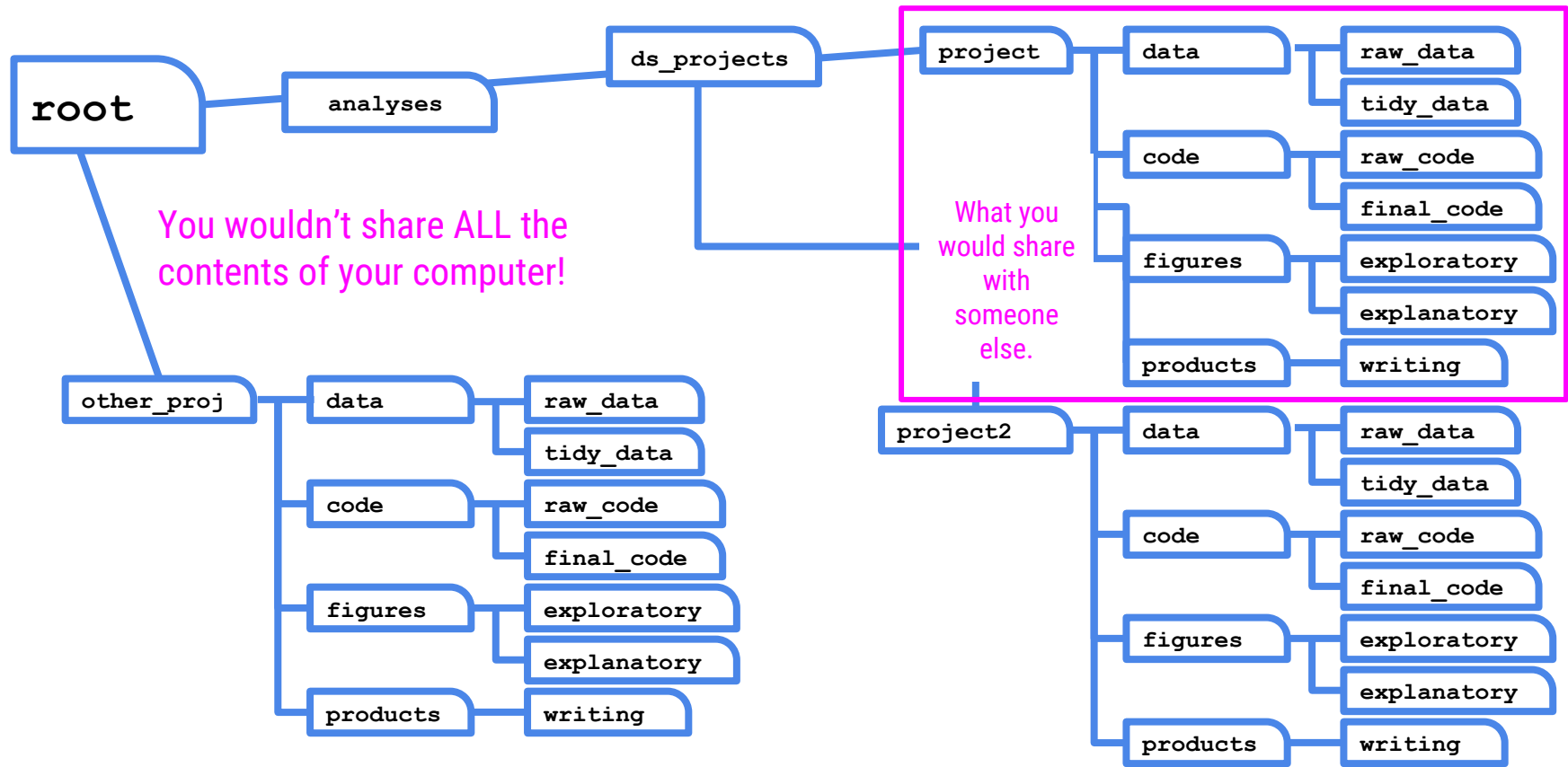
What you  
would share  
with someone  
else.



All paths in your code should be relative to `/cloud/project` !





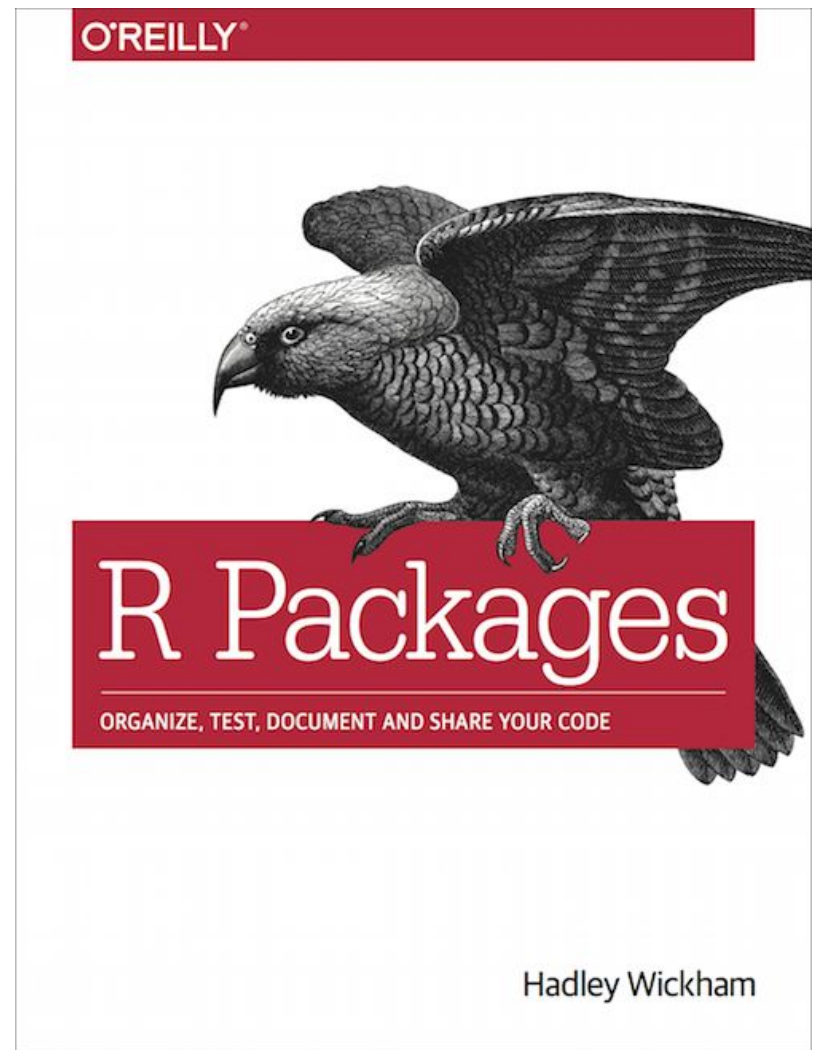


**Absolute paths** like `/root/analyses/ds_projects/project/` wouldn't make sense on someone else's computer !

R packages allow you to  
accomplish things more easily  
or accomplish things that you  
wouldn't have been able to do  
otherwise!

```
# to install and load here package  
install.packages("here")  
library(here)
```

<http://r-pkgs.had.co.nz/>



ConsoleTerminal

/cloud/project/  
> library(here)  
>  
> getwd()  
[1] "/cloud/project"  
>  
> here()  
[1] "/cloud/project"  
>  
> |

EnvironmentHistoryConnections

Import Dataset  
Global Environment  
Environment is empty

FilesPlotsPackagesHelpViewer  
New FolderUploadDeleteRenameMore  
/ > cloud > project  
NameSizeModified  
..0 BMay 17, 2018, 12:15 PM  
.Rhistory  
code  
data  
figures  
products  
project.Rproj205 BMay 17, 2018, 12:15 PM

here () defines your base directory to be the directory where you have a .Rproj file



```
Console Terminal x
/cloud/project/code/
> library(here)
>
> getwd()
[1] "/cloud/project"
>
> here()
[1] "/cloud/project"
>
> setwd("/cloud/project/code")
>
> getwd()
[1] "/cloud/project/code"
>
> here()
[1] "/cloud/project"
>
> |
```

here () does *not* care  
what you current  
working directory is. It's  
looking for a .Rproj file

Environment History Connections

Global Environment

Environment is empty

Files Plots Packages Help Viewer

New Folder Upload Delete Rename More

/ > cloud > project

	Name	Size	Modified
	..		
<input type="checkbox"/>	.Rhistory	0 B	May 17, 2018, 12:15 PM
<input type="checkbox"/>	code		
<input type="checkbox"/>	data		
<input type="checkbox"/>	figures		
<input type="checkbox"/>	products		
<input type="checkbox"/>	project.Rproj	205 B	May 17, 2018, 12:15 PM

File Edit Code View Plots Session Build Debug Profile Tools Help

R 3.4.4

Console Terminal

```
/cloud/project/  
> library(here)  
>  
> getwd()  
[1] "/cloud/project"  
>  
> here()  
[1] "/cloud/project"  
> here("code", "raw_code", "intro_code.R")  
[1] "/cloud/project/code/raw_code/intro_code.R"  
>  
>
```

Environment History Connections

Global Environment

Environment is empty

Files Plots Packages Help Viewer

New Folder Upload Delete Rename More

/ > cloud > project > code > raw\_code

	Name	Size	Modified
	..		
<input type="checkbox"/>	intro_code.R	12 B	May 17, 2018, 12:32 PM

here () gets you the path to this file!

here ( )

