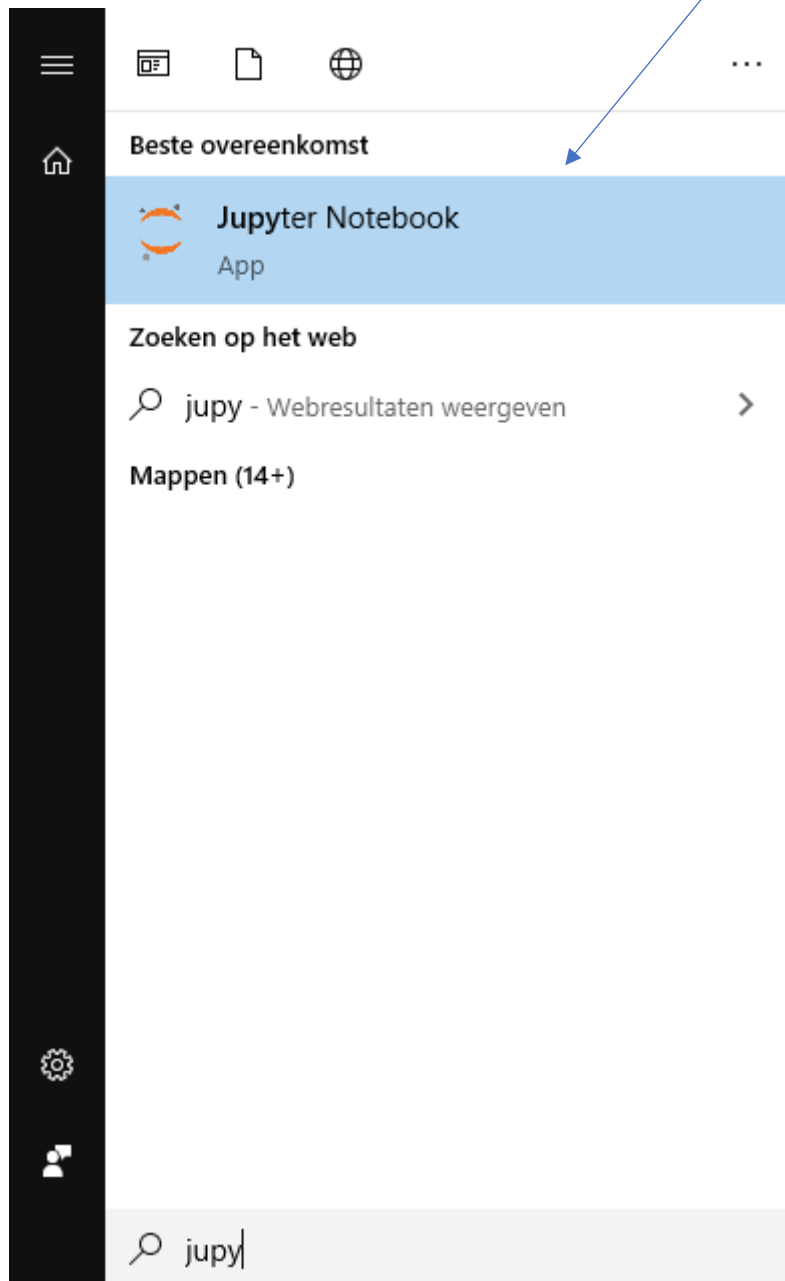


# Basisinstructies Jupyter Notebook

## 1. Opstarten

Klik  en typ "jupyter"




## De Jupyter Notebook wordt opgestart

```
Jupyter Notebook

[I 13:33:30.154 NotebookApp] JupyterLab extension loaded from C:\Users\20002681\AppData\Local\Continuum\anaconda3\lib\site-packages\jupyterlab
[I 13:33:30.155 NotebookApp] JupyterLab application directory is C:\Users\20002681\AppData\Local\Continuum\anaconda3\share\jupyter\lab
[I 13:33:30.156 NotebookApp] Serving notebooks from local directory: C:\Users\20002681
[I 13:33:30.158 NotebookApp] The Jupyter Notebook is running at:
[I 13:33:30.158 NotebookApp] http://localhost:8888/?token=ae62f60306cf3914ddb3b1e1a10cfea45d943b1d3cce8ce9
[I 13:33:30.158 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).

[C 13:33:30.396 NotebookApp]

To access the notebook, open this file in a browser:
    file:///C:/Users/20002681/AppData/Roaming/jupyter/runtime/nbserver-115780-open.html
Or copy and paste one of these URLs:
    http://localhost:8888/?token=ae62f60306cf3914ddb3b1e1a10cfea45d943b1d3cce8ce9
```

 jupyter

QuitLogout

FilesRunningClusters

Select items to perform actions on them.

UploadNew ↻

0 ▾

/

Name ▾Last ModifiedFile size

<input type="checkbox"/>	3D Objects	2 maanden geleden	
<input type="checkbox"/>	Contacts	2 maanden geleden	

## 2. Een bestaande notebook openen

Browse naar de plaats waar jij de notebook opgeslagen hebt en klik op die notebook die je wil openen.

Files




Running

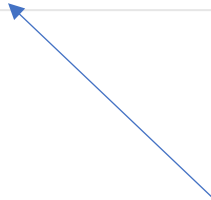
Clusters

Select items to perform actions on them.

☐ 0 ▾

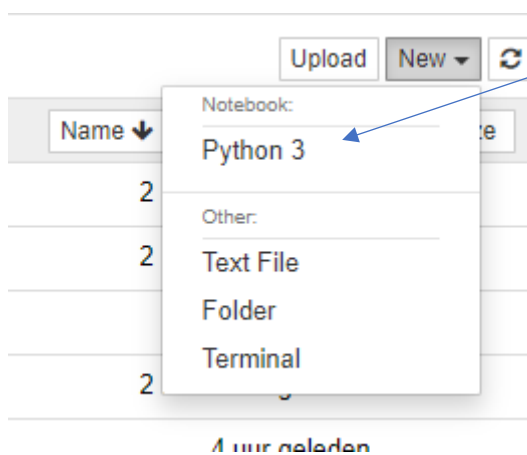
/ Documents / LESSEN / lessenPXL1920 / data adv 2 TIN / cursus / combinatieleer + kansrekenen

<input type="checkbox"/>	..
<input type="checkbox"/>	Kansrekenen - log operatoren
<input type="checkbox"/>	 Kansrekenen Voorbeeld 13 pg 31-Copy1.ipynb
<input type="checkbox"/>	 Kansrekenen Voorbeeld 13 pg 31-oplossing.ipynb
<input type="checkbox"/>	 Kansrekenen Voorbeeld 13 pg 31.ipynb

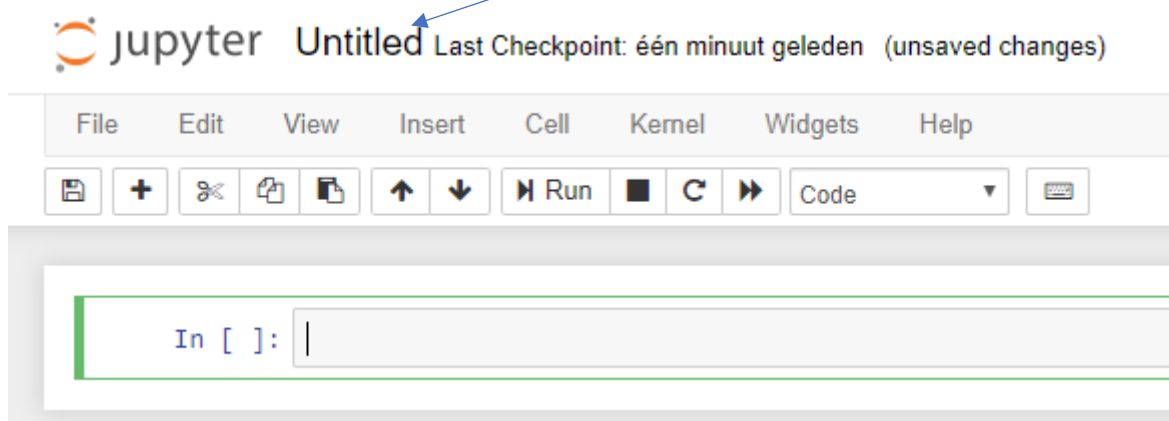


### 3. Nieuwe Notebook aanmaken

Wil je in bovenstaande map een nieuwe notebook aanmaken, kies dan rechts bovenaan “New” en kies Python 3.



We hebben nu een nieuwe lege notebook.



We kunnen deze een naam geven door op Untitled te klikken en een nieuwe naam in te voeren vb: “Mijn eerste notebook”

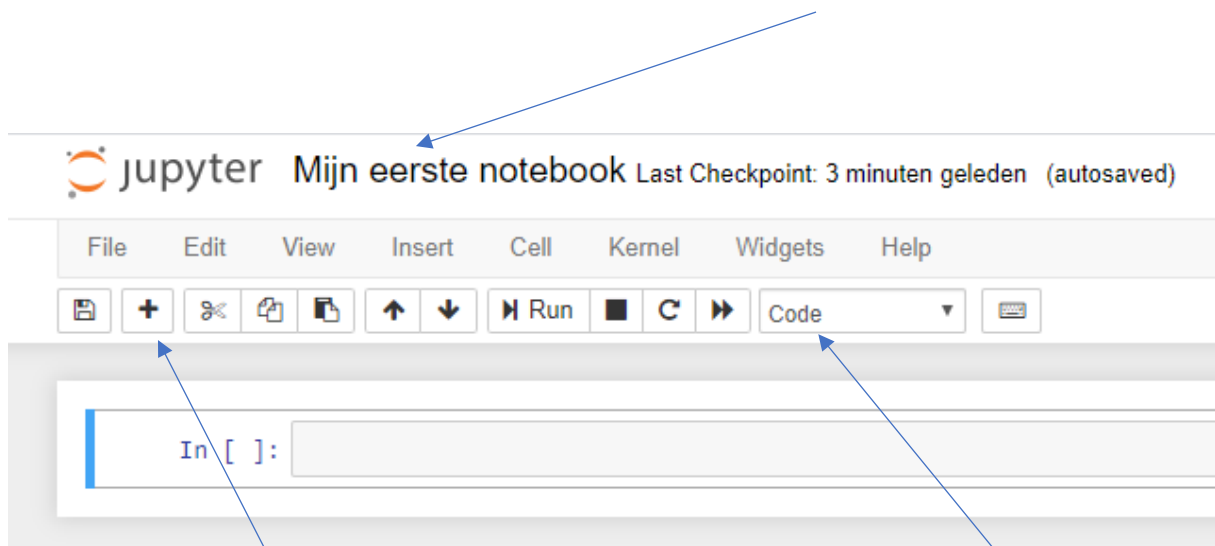
Rename Notebook

Enter a new notebook name:

Untitled

Cancel

Rename

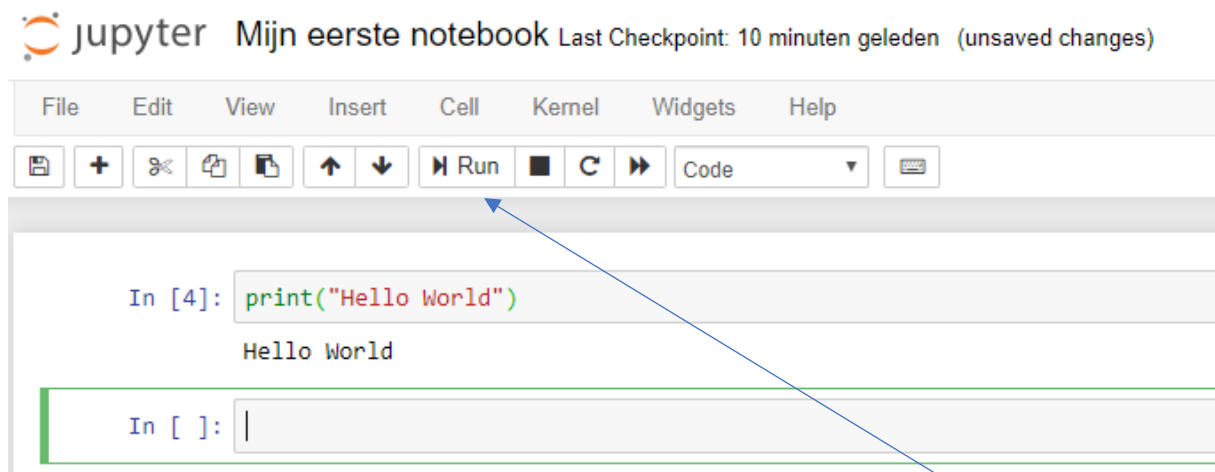


Elke notebook bestaat uit cellen en “by default” krijg je 1 cel te zien. Je kan extra cellen aanmaken door op het “plus-teken” te drukken.

Deze cellen kunnen verschillende soorten items bevatten maar “by default” bevat een cel “Code”.

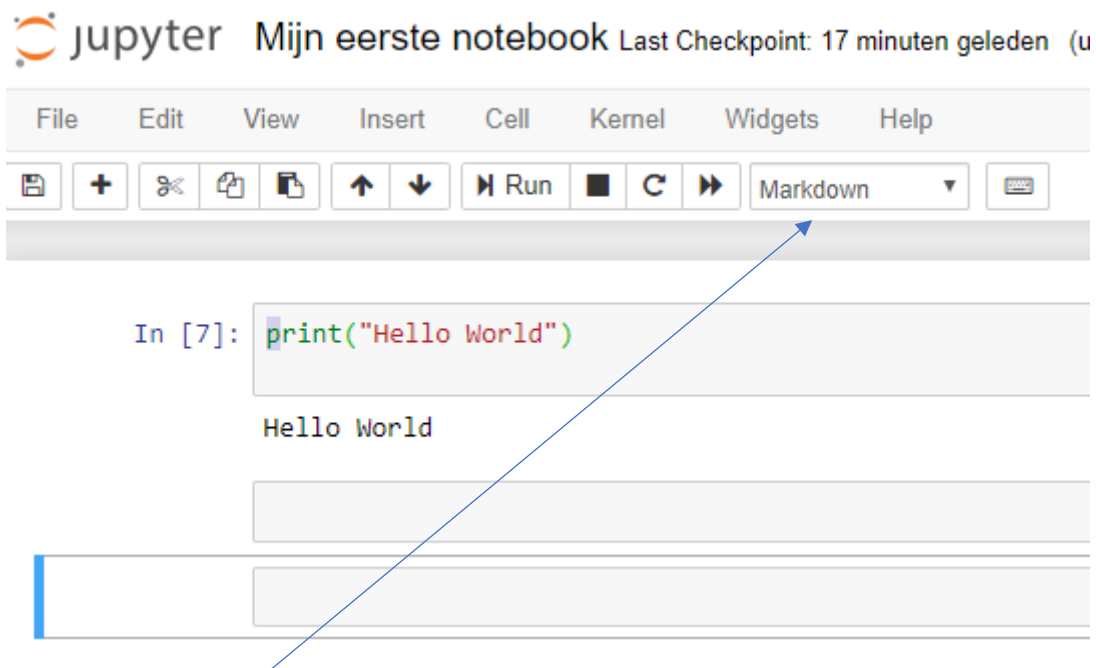
## 4. Notebook opvullen met code, tekst, ...

In de **code-cellen** kan je Python code typen bvb `print("Hello World")`



Klik “Run” OF druk CTRL + ENTER (Windows) - COMMAND + ENTER (Mac)

In **Markdown-cellen** kan je geformatteerde tekst typen



Selecteer “Markdown” Of druk ESC + M



Run (idem aan hierboven) de Markdown cellen



## 5. Opfrissing python instructies

```
In [8]: #Simpele expressie  
2 + 3
```

Out[8]: 5

```
In [9]: #Variabele  
x = 7  
print(x)
```

7

```
In [10]: #selectie  
if x < 5:  
    print("x is kleiner dan 5")  
elif x < 7:  
    print("x is kleiner dan 7 maar groter dan 5")  
else:  
    print("x is groter dan 7")
```

x is groter dan 7

```
In [11]: #herhaling: for  
for i in range(5):  
    print(i)
```

0  
1  
2  
3  
4

```
In [12]: #herhaling: while  
y = 7  
while y < 10:  
    print(y)  
    y += 1
```

7  
8  
9

```
In [17]: #Python functie
def print_hallo(naam):
    print("Hallo " + naam)
```

```
In [18]: print_hallo("Heidi")
```

Hallo Heidi

```
In [17]: 1 #Python functie
2 #ESC + L: toon lijn - nummers
3 def print_hallo(naam):
4     print("Hallo " + naam)
```

```
In [19]: ! python --version
```

Python 3.7.3



## 6. Keyboard shortcuts:

Klik op Help en selecteer Keyboard Shortcuts

### Keyboard shortcuts

The Jupyter Notebook has two different keyboard input modes. **Edit mode** allows you to type code or text into a cell and is indicated by a green cell border. **Command mode** binds the keyboard to notebook level commands and is indicated by a grey cell border with a blue left margin.

#### Command Mode (press `Esc` to enable)

[Edit Shortcuts](#)

`F`: find and replace

`Ctrl-Shift-F`: open the command palette

`Ctrl-Shift-P`: open the command palette

`Enter`: enter edit mode

`P`: open the command palette

`Shift-Enter`: run cell, select below

`Ctrl-Enter`: run selected cells

`Alt-Enter`: run cell and insert below

`Y`: change cell to code

`M`: change cell to markdown

`R`: change cell to raw

`1`: change cell to heading 1

`2`: change cell to heading 2

`3`: change cell to heading 3

`4`: change cell to heading 4

`5`: change cell to heading 5

`6`: change cell to heading 6

`K`: select cell above

`Up`: select cell above

`Down`: select cell below

`J`: select cell below

`Shift-K`: extend selected cells above

`Shift-Up`: extend selected cells above

`Shift-Down`: extend selected cells below

`Shift-J`: extend selected cells below

`A`: insert cell above

`B`: insert cell below

`X`: cut selected cells

`C`: copy selected cells

`Shift-V`: paste cells above

`V`: paste cells below

`Z`: undo cell deletion

`D`, `D`: delete selected cells

`Shift-M`: merge selected cells, or current cell with cell below if only one cell is selected

`Ctrl-S`: Save and Checkpoint

`S`: Save and Checkpoint

`L`: toggle line numbers

`O`: toggle output of selected cells

`Shift-O`: toggle output scrolling of selected cells

`H`: show keyboard shortcuts

`I`, `I`: interrupt the kernel

`0`, `0`: restart the kernel (with dialog)

`Esc`: close the pager

`Q`: close the pager

`Shift-L`: toggles line numbers in all cells,

Close

## 7. Notebook saven

CTRL + S