

# Supplementary notes ITP-MAY23-2

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## IntelliJ shortcuts - Java environment

psvm / main + TAB

alt + shift + f10 run - for first time

sout

souf

alt + enter for imports

CMD/CTRL + ALT + T + 6 for surround with try/catch

## IntelliJ duplicate line

- Mac CMD + D
- Win CTRL + D

## IntelliJ multi cursor

- **Select next occurrence of the current word or selection: Ctrl+G on macOS and Alt+J on Windows and Linux**
- Select all  
occurrences: *Ctrl+Cmd+G / Shift+Ctrl+Alt+J*
- *Shift+Ctrl+Alt+J on images interferes with guacamole flyout menu*
- Editing code with multi-select/multiple cursors (WebStorm docs)

<https://www.jetbrains.com/webstorm/guide/tips/multi-cursor/>

## VS Code shortcuts - Python environment

CTRL + B	toggle explorer pane / full screen
CTRL + +/-	up/down font size
CTRL + /	toggle comment on/off
CTRL + D	multi-cursor select
ALT + SHIFT + DOWN/ UP	duplicate line down/up

## JAVA EXTRAS

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## POST-COURSE SELF-STUDY RESOURCES (JAVA)

Jenkov - great practical blog we recommend

<http://tutorials.jenkov.com/>

Heinz Kabutz newsletter - keeps you up to date with newest releases

<https://www.javaspecialists.eu/>

Heinz' Twitter:

[@heinzkabutz](https://twitter.com/heinzkabutz)

ALL Java SE (standard edition) 11 classes A-Z:

<https://docs.oracle.com/en/java/javase/11/docs/api/allclasses.html>

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## PYTHON EXTRAS

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### Libraries

Python standard

<https://docs.python.org/3/library/>

Python Open Source

<https://pypi.org/>

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## POST-COURSE SELF-STUDY RESOURCES (PYTHON)

W3

<https://www.w3schools.com/python/>

Docs

<https://docs.python.org/3/tutorial/>

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## notes / references from docs (Python):

<https://docs.python.org/3/tutorial/modules.html>

### NOTES - README

#### **dir(\_\_builtins\_\_)**

This will output a list containing firstly builtin Exception Objects, then dunder data attributes and then what looks like a listing of the built-in functions (not built-in modules). The functions begin from `abs` which is at index 82. So to display just the functions from `__builtins__` we can use the slicing operator as follows:

```
>>> dir (__builtins__)[82:]
```

*or more generically:*

```
>>> dir (__builtins__)[dir(__builtins__).index('abs'):]
```

*to get command line commands to work copied in from PDF you may need to re-type quotes, which may be non-standard characters*

<https://docs.python.org/3/library/builtins.html>

*lists diff tuples*

<https://www.geeksforgeeks.org/python-difference-between-list-and-tuple/>

*objects to string*

<https://www.geeksforgeeks.org/str-vs-repr-in-python/>

*object equality and identity*

<https://www.geeksforgeeks.org/difference-between->

[and-is-operator-in-python/](#)

[https://www.geeksforgeeks.org/difference-between-\\_\\_eq\\_\\_-vs-is-vs-in-python/](https://www.geeksforgeeks.org/difference-between-__eq__-vs-is-vs-in-python/)

variable args

<https://www.geeksforgeeks.org/args-kwargs-python/>

Modules > Packages > Libraries > Frameworks  
explained

<https://learnpython.com/blog/python-modules-packages-libraries-frameworks/>

number format to two decimal places:

```
number = 3
```

```
>>> print(f'number: {number:.2f}')
```

```
number: 3.00
```

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## FROM THE INTRO: LINKS TO MIND CONTROLLED DRONE RESEARCH

**Experimenting with brain-computer interfaces in  
JavaScript.**

<https://medium.com/@devdevcharlie/experimenting-with-brain-computer-interfaces-in-javascript-8d6cb891fda8>

***Look mum, no hands! — Brain controlled JavaScript  
- Charlie Gerard - JSConf EU 2018***

<https://www.youtube.com/watch?v=7KhFO-qCVyg>

live demo in UI **12:35 (13:45)**

**Charlie Gerard video from ITP:**

INTRO - Charlie Gerard Mind Control With JavaScript

<https://www.youtube.com/watch?v=Sp6egeaFNC4>

**CUE TO 07:55**

**PLAY FROM 07:55 - 10:05,**

**17:40 - 20:20**

**07:55** - 08:35 you can control a lot of robotics devices with Node out back and JS on web front-end

- so basically the one language

**08:45** how you got started in software development

- via advertising!

*-[14:15 I deleted everything story]*

**17:40 - 20:05** ***be comfortable with failing (hardware and software), always unit test,***

- ***you learn a lot from failing - Facebook's fail fast!***
- 19:15 - ***not be scared of trying***

interested: Charlie's slide deck:

[https://docs.google.com/presentation/d/1WQtkwAD6XOpUyt7slcOhGp4qNAqZLpchr\\_vlcw1o1pY/edit#slide=id.g12b62d05e7\\_0\\_204](https://docs.google.com/presentation/d/1WQtkwAD6XOpUyt7slcOhGp4qNAqZLpchr_vlcw1o1pY/edit#slide=id.g12b62d05e7_0_204)

twitter:

<https://twitter.com/devdevcharlie>

Charlie on deep image reconstruction

<https://www.youtube.com/watch?v=pVvf4jw0Ado>

**deep image reconstruction** to visualise dreams **38:50**  
**(40:45)**

<https://www.youtube.com/watch?v=-PbpWYBRBgM>  
**mind control drone demo 15:30 - 17:05**

**open source gaze detection code**

<https://github.com/charliegerard/gaze-detection>

**hands free coding using gaze detection (with VSC  
extension ES7 snippets for React/Redux/GraphQL)**

<https://charliegerard.dev/project/hands-free-coding>

**Note VS Code is same editor as Charlie uses live**

<https://www.geeksforgeeks.org/ieee-standard-754-floating-point-numbers/>

<https://www.geeksforgeeks.org/java-string-format-method-with-examples/>

C# tutorials <https://www.w3schools.com/cs/index.php>

<https://learn.microsoft.com/en-us/dotnet/csharp/>