

# Note Created From One File

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# Heading 1

## Subheading 1

### Sub-subheading 1

The subheadings will be included only to a particular depth, which can be configured by adding the `--toc-depth=N` argument to change the depth of the TOC to N deep.

- Here
- Is
- A
- Bullet
- List

Here is a link

You can also link to another heading with modified link Markdown! Click this to go to [Linked Heading 1](#)

Pandoc has great documentation on the Markdown syntax they implement, very much worth giving a read to see all the cool features that can be used!

<https://pandoc.org/MANUAL.html>

LaTeX can also be injected into the Markdown file, as seen above and below with the `\newpage` directive I added to add a page break where I find I want to specify to pandoc that the following text should be on a new page, eg the first one creates a new page after the TOC so that it has its own title and TOC page.

## Code Segment

Here's some code that I copied from Rosetta Code to show the code Highlighting!

```
1 from functools import (reduce)
2 from operator import (add)
3
4 # pts :: Int -> [(Int, Int, Int)]
5 def pts(n):
6     m = 1 + n
7     return [(x, y, z) for x in xrange(1, m)
8                 for y in xrange(x, m)
9                 for z in xrange(y, m) if x**2 + y**2 == z**2]
10
11 # pts2 :: Int -> [(Int, Int, Int)]
12 def pts2(n):
13     m = 1 + n
14     return bindList(
15         xrange(1, m)
16     )(lambda x: bindList(
17         xrange(x, m)
18     )(lambda y: bindList(
19         xrange(y, m)
20     )(lambda z: [(x, y, z)] if x**2 + y**2 == z**2 else [])))
21
22 # pts3 :: Int -> [(Int, Int, Int)]
23 def pts3(n):
24     m = 1 + n
25     return concatMap(
26         lambda x: concatMap(
27             lambda y: concatMap(
28                 lambda z: [(x, y, z)] if x**2 + y**2 == z**2 else []
29             )(xrange(y, m))
30         )(xrange(x, m))
31     )(xrange(1, m))
32
33 # GENERIC -----
34
35 # concatMap :: (a -> [b]) -> [a] -> [b]
36 def concatMap(f):
37     return lambda xs: (
38         reduce(add, map(f, xs), [])
39     )
40
41 # (flip concatMap)
42 # bindList :: [a] -> (a -> [b]) -> [b]
43 def bindList(xs):
44     return lambda f: (
45         reduce(add, map(f, xs), [])
46     )
47
48 def main():
49     for f in [pts, pts2, pts3]:
50         print (f(20))
51
52 main()
```

## Linked Heading 1

Here is an example of embedding an image into the notes! Enjoy this adorable sleeping kitten!



Figure 1: Cat Tax