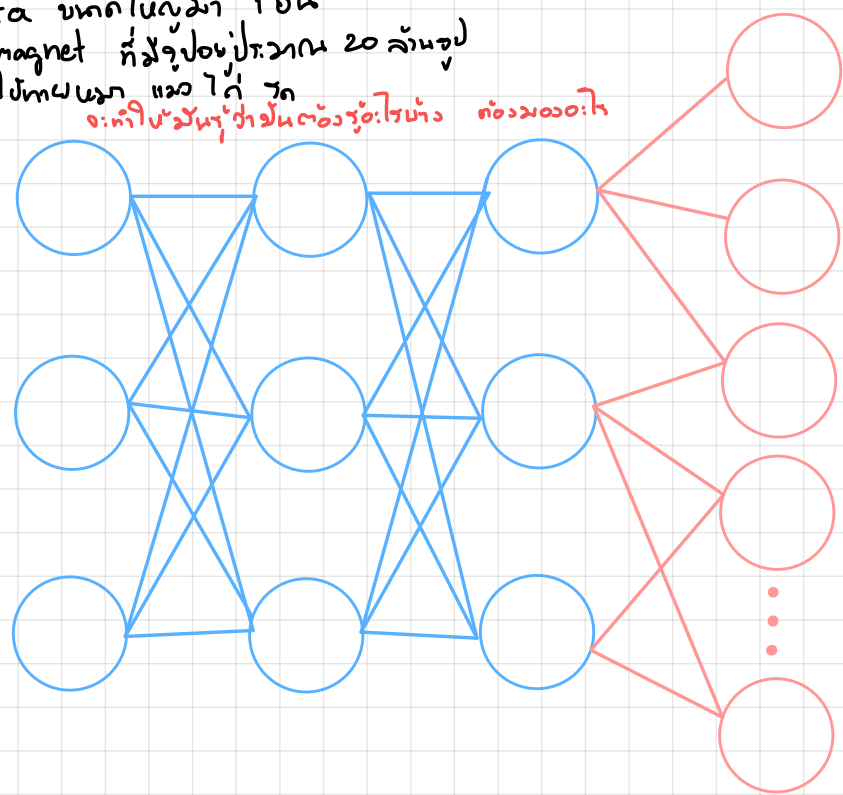
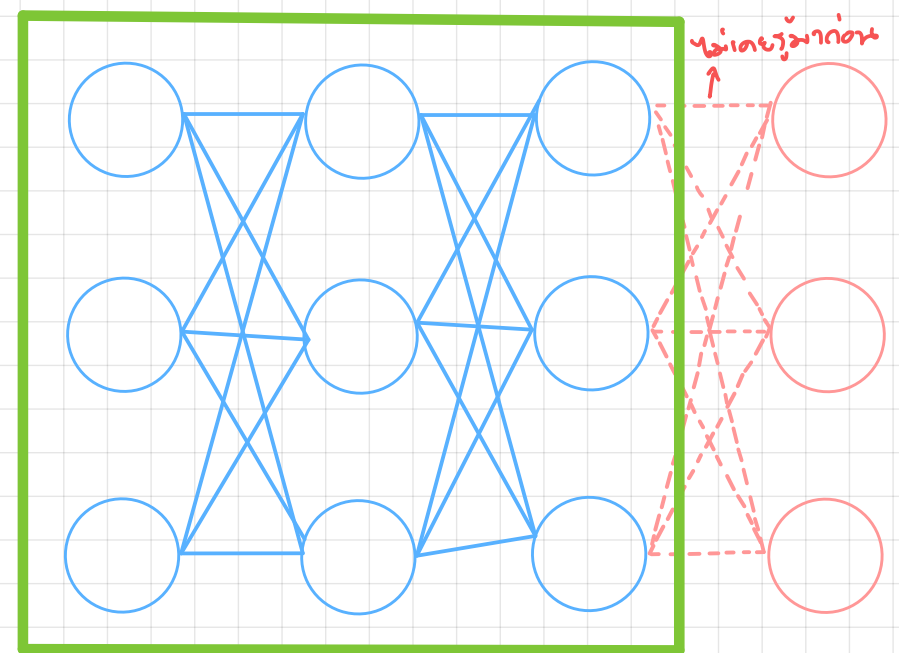


ถ้า data ขนาดใหญ่มา 1 อัน
 ↳ Imagnet ที่ใช้ประกอบประมาณ 20 ล้านรูป
 ↳ โปรแกรมมา แล้วยังได้ 70

จะทำการปรับให้มันทำงานได้ดีขึ้น

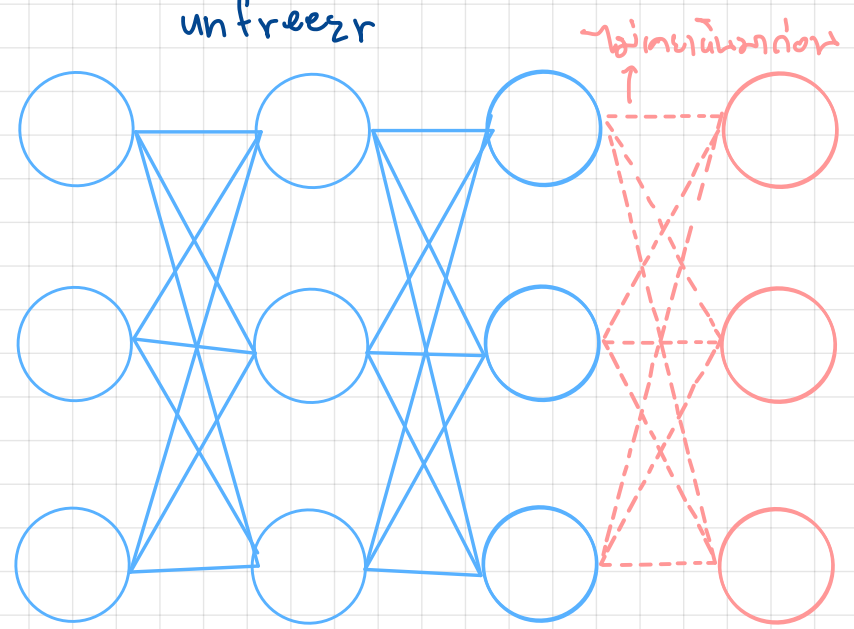


Freezer



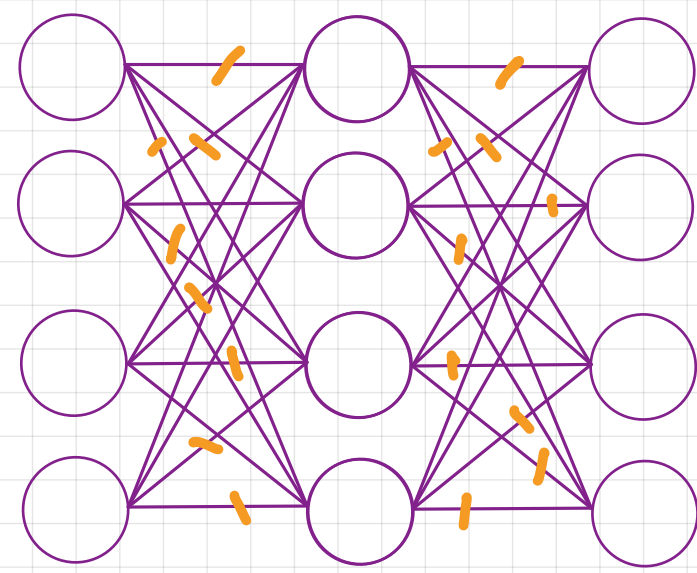
- freeze แล้วทำการปรับ Weight

unfreezer



โครง

Unfreezer ปรับในมันและอีกชั้น



Drop out หรือ Overfitting
 ↳ ทำให้ไม่ส่งทุกอย่าง
 ที่มันเคยเห็นไม่ได้เลย
 ↳ ต้องปรับให้มัน
 ไม่ถูกส่งตรงมาแบบ
 ย้ำซ้ำ

python_script101.py X

```
1 def print_other():
2     print('something else')
3
4 def print_ones():
5     print('1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1')
6
7 if __name__ == "__main__":
8     print_ones()
9     print_other()
10    print_ones()
11
12
13
14 # import argparse #สำหรับ รับ input จากภายนอก
15
16
17 # def parse_input():
18 #     parser = argparse.ArgumentParser(description='test program to
19 #     parser.add_argument(
20 #         'm',
21 #         type=int,
22 #         help='value of M positional argument')
23
24 #     parser.add_argument(
25 #         '--x',
26 #         type=int,
27 #         help='value of x')
28
29 #     parser.add_argument(
30 #         '--yval',
31 #         type=int,
32 #         default=3,
33 #         help='value of y')
34
35 #     args = parser.parse_args()
36 #     return args
37
38 # args = parse_input()
39
```

ใน print_other()
แล้ว something else

ใน print_ones()
แล้ว 11111...1

main function

python_script101.py - Visual Studio Code

```
root@LovelyJeno: ~/codes/AIprototype65
(base) root@LovelyJeno:~# python
Python 3.8.16 (default, Jan 17 2023, 23:13:24)
[GCC 11.2.0] :: Anaconda, Inc. on linux
Type "help", "copyright", "credits" or "license" for more information.
>>>
KeyboardInterrupt
>>>
[1]+  Stopped                  python
(base) root@LovelyJeno:~# ls
Miniconda3-py38_23.1.0-1-Linux-x86_64.sh  codes  conda  miniconda3  test
(base) root@LovelyJeno:~# cd codes
(base) root@LovelyJeno:~/codes# ls
AIprototype65
(base) root@LovelyJeno:~/codes# cd AIprototype65/
(base) root@LovelyJeno:~/codes/AIprototype65# ls
README.md      python_script101.py  '000000 2.pdf'  '000000 4.pdf'
'Tensorflow(network).ipynb'  '000000 1.pdf'    '000000 3.pdf'  '000000 5.pdf'
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py
ai prototype
Traceback (most recent call last):
  File "python_script101.py", line 30, in <module>
    args = parse_input()
NameError: name 'parse_input' is not defined
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py
ai prototype
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
something else
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
(base) root@LovelyJeno:~/codes/AIprototype65#
```

ไฟล์ที่แสดงจากไฟล์ python_script101.py

```
import argparse #สำหรับ รับ input จากภายนอก
```

```
def parse_input():
```

```
    parser = argparse.ArgumentParser(description='test program to learn about argparse and subprocess')
```

```
    # parser.add_argument(
```

```
    #     'm',
```

```
    #     type=int,
```

```
    #     help='value of M positional argument')
```

```
    # parser.add_argument(
```

```
    #     '--x',
```

```
    #     type=int,
```

```
    #     help='value of x')
```

```
    parser.add_argument(
```

```
    #     '--yval',
```

```
    #     type=int,
```

```
    #     * default=3,
```

```
    #     help='value of y')
```

```
    args = parser.parse_args()
```

```
    return args
```

```
def print_other():
```

```
    print('something else')
```

```
def print_ones():
```

```
    print('1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1')
```

```
if __name__ == "__main__":
```

```
    x = parse_input()
```

```
    print_ones()
```

```
    print_other()
```

```
    print_ones()
```

```
    print(f'YVAL = {x.yval}')
```

```
    # args = parse_input()
```

```
    # x = args.x
```

```
    # y = args.yval
```

```
    # print(f'M = {args.m}')
```

```
    # print(f'calculate {x} x {y} = {x*y}')
```

```
Nothing else
```

```
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
```

```
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py
```

```
(age: python_script101.py [-h] [--x X] [--yval YVAL] m
```

```
python_script101.py: error: the following arguments are required: m
```

```
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py
```

```
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
```

```
something else
```

```
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
```

```
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py -h
```

```
usage: python_script101.py [-h] [--yval YVAL]
```

```
test program to learn about argparse and subprocess
```

```
optional arguments:
```

```
-h, --help show this help message and exit
```

```
--yval YVAL value of y
```

```
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py -h
```

```
usage: python_script101.py [-h] [--yval YVAL]
```

```
test program to learn about argparse
```

```
optional arguments:
```

```
-h, --help show this help message and exit
```

```
--yval YVAL value of y
```

```
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py
```

```
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
```

```
something else
```

```
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
```

```
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py
```

```
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
```

```
something else
```

```
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
```

```
YVAL = 3
```

```
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py --yval=8
```

```
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
```

```
something else
```

```
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
```

```
YVAL = 8
```

```
(base) root@LovelyJeno:~/codes/AIprototype65#
```

ค่าเริ่มต้นของ yval = 3

* default=3, help คือบอกว่าค่าที่คืออะไร

-h = help

description

ไม่ได้ใส่ค่าอะไรจึงแสดงเป็นค่า default

input จากข้างนอก

python_script101.py

Ubuntu-20.04 > root > codes > AIprototype65 > python_script101.py > parse_input

```

1  import argparse #สำหรับ รับ input จากภายนอก
2
3  def parse_input():
4      parser = argparse.ArgumentParser(description='test program to learn about argparse')
5      * parser.add_argument(
6          'm',
7          type=int,
8          help='value of M positional argument')
9
10     * parser.add_argument(
11         'n',
12         type=int,
13         help='value of M positional argument')
14
15     # parser.add_argument(
16     #     '--x',
17     #     type=int,
18     #     help='value of x')
19
20     # parser.add_argument(
21     #     '--yval',
22     #     type=int,
23     #     default=3,
24     #     help='value of y')
25
26     args = parser.parse_args()
27     return args
28
29 def print_other(): *
30     print('something else')
31
32 def print_ones(): *
33     print('1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1')
34
35 if __name__ == "__main__":
36     x = parse_input()
37     print_ones() *
38     print_other() *
39     print_ones() *
40
41     # print(f'YVAL = {x.yval}')
42     # print(f'x = {x.x}')
43     print(f'm = {x.m}') *
44     print(f'n = {x.n}') *
45
46
47     # args = parse_input()
48

```

root@LovelyJeno: ~/codes/AIprototype65

```

--x X      value of x
--yval YVAL value of y
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py 8
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
something else
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
YVAL = 3
x = None
x = 8
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py 8 7
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
something else
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Traceback (most recent call last):
  File "python_script101.py", line 42, in <module>
    print(f'x = {x.m}')
AttributeError: 'NoneType' object has no attribute 'm'
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py 8 7
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
something else
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Traceback (most recent call last):
  File "python_script101.py", line 42, in <module>
    print(f'm = {x.m}')
AttributeError: 'NoneType' object has no attribute 'm'
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py 8 7
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
something else
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Traceback (most recent call last):
  File "python_script101.py", line 42, in <module>
    print(f'm = {x.m}')
AttributeError: 'NoneType' object has no attribute 'm'
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py 8 7
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 *
something else *
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 *
m = 8 *
n = 7 *
(base) root@LovelyJeno:~/codes/AIprototype65#

```

```
python_script101.py X
Ubuntu-20.04 > root > codes > AIprototype65 > python_script101.py > parse_input
1 import argparse #สำหรับ รับ input จากภายนอก
2
3 def parse_input():
4     parser = argparse.ArgumentParser(description='test program to learn about argparse')
5     # parser.add_argument(
6     #     'm',
7     #     type=int,
8     #     help='value of M positional argument')
9
10    # parser.add_argument(
11    #     'n',
12    #     type=int,
13    #     help='value of N positional argument')
14
15    parser.add_argument(
16        '--x',
17        type=int,
18        required=True,
19        help='value of x')
20
21    parser.add_argument(
22        '--yval',
23        type=int,
24        default=3,
25        help='value of y')
26
27    args = parser.parse_args()
28    return args
29
30 def print_other():
31     print('something else')
32
33 def print_ones():
34     print('1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1')
35
36 if __name__ == "__main__":
37     x = parse_input()
38     print_ones()
39     print_other()
40     print_ones()
41
42     print(f'YVAL = {x.yval}')
43     print(f'x = {x.x}')
44     # print(f'm = {x.m}')
45     # print(f'n = {x.n}')
46
47
48     # args = parse_input()
```

ถ้ามี ขีด (--) จะสามารถเรียกใช้ตอนไหนก็ได้
* ถ้าไม่ขีด (--) จะต้องอยู่ในคำที่มันถึงขนาดไว้
ไม่ขีดคือ positional

```
root@LovelyJeno: ~/codes/AIprototype65
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Traceback (most recent call last):
  File "python_script101.py", line 42, in <module>
    print(f'x = {x.m}')
AttributeError: 'NoneType' object has no attribute 'm'
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py 8 7
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
something else
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Traceback (most recent call last):
  File "python_script101.py", line 42, in <module>
    print(f'm = {x.m}')
AttributeError: 'NoneType' object has no attribute 'm'
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py 8 7
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
something else
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Traceback (most recent call last):
  File "python_script101.py", line 42, in <module>
    print(f'm = {x.m}')
AttributeError: 'NoneType' object has no attribute 'm'
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py 8 7
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
something else
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
m = 8
n = 7
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py --yval=7
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
something else
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
*YVAL = 7
x = None ← ไม่ได้ใส่ค่าเลยเงิน None
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py --yval=7
usage: python_script101.py [-h] --x X [--yval YVAL]
python_script101.py: error: the following arguments are required: --x
(base) root@LovelyJeno:~/codes/AIprototype65# python python_script101.py -h
usage: python_script101.py [-h] --x X [--yval YVAL]

test program to learn about argparse

optional arguments:
  -h, --help  show this help message and exit
  --x X       value of x
  --yval YVAL value of y
(base) root@LovelyJeno:~/codes/AIprototype65# git status
On branch main
Your branch is up to date with 'origin/main'.
```