

IT 314 - Software Engineering

Lab 5



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Static Analysis Tool used: **mypy**

Github repository used:

<https://github.com/omp217/Deep-Learning-Specialization-By-Andrew-Ng>

I'll be using mypy tool for each file present in the

<https://github.com/omp217/Deep-Learning-Specialization-By-Andrew-Ng/tree/main/Course1-Neural%20Networks%20And%20Deep%20Learning/Week2/Programming%20Assignments>

```
~/IT314-lab5$ git clone https://github.com/omp217/Deep-Learning-Specialization-By-Andrew-Ng.git
Cloning into 'Deep-Learning-Specialization-By-Andrew-Ng' ...
remote: Enumerating objects: 258, done.
remote: Counting objects: 100% (133/133), done.
remote: Compressing objects: 100% (89/89), done.
remote: Total 258 (delta 25), reused 95 (delta 18), pack-reused 125
Receiving objects: 100% (258/258), 35.11 MiB | 14.76 MiB/s, done.
Resolving deltas: 100% (49/49), done.
~/IT314-lab5$ cd 'Deep-Learning-Specialization-By-Andrew-Ng/Course1-Neural Networks And Deep Learning/Week2/Programming Assignments'
```

```
~/.../Week2/Programming Assignments$ pip install mypy
Looking in indexes: https://package-proxy.replit.com/pypi/simple/
Collecting mypy
  Using cached mypy-1.1.1-cp310-cp310-manylinux_2_17_x86_64.manylinux2014_x86_64.whl
Collecting mypy_extensions>=1.0.0
  Using cached mypy_extensions-1.0.0-py3-none-any.whl
Requirement already satisfied: typing_extensions>=3.10 in /home/runner/IT314-lab5/venv/lib/python3.10/site-packages (from mypy) (3.10.0.2)
Requirement already satisfied: tomli>=1.1.0 in /home/runner/IT314-lab5/venv/lib/python3.10/site-packages (from mypy) (2.0.1)
WARNING: pip is using a content-addressable pool to install files from. This experimental feature is enabled through --use-feature=content-addressable-pool and it is not ready for production.
Installing collected packages: mypy_extensions, mypy
Successfully installed mypy-1.1.1 mypy_extensions-1.0.0
```

1. Python_Basics_with_Numpy.ipynb

[illegible]

Explanation of error:

- In python, for assigning variable 1 bool value, we have to write "True" and for assigning variable 0 bool value, we have to write "False".

2. Logistic_Regression_with_a_Neural_Network_mindset.ipynb

```
~/../Week2/Programming Assignments$ python -m mypy 2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:184: error: Name "false" is not defined [name-defined]
}
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:188: error: Name "false" is not defined [name-defined]
}
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:190: error: Name "false" is not defined [name-defined]
}
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:192: error: Name "true" is not defined [name-defined]
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:193: error: Name "false" is not defined [name-defined]
}
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:278: error: Name "false" is not defined [name-defined]
}
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:282: error: Name "false" is not defined [name-defined]
}
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:284: error: Name "false" is not defined [name-defined]
}
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:286: error: Name "true" is not defined [name-defined]
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:287: error: Name "false" is not defined [name-defined]
}
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:447: error: Name "false" is not defined [name-defined]
}
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:451: error: Name "false" is not defined [name-defined]
}
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:453: error: Name "false" is not defined [name-defined]
}
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:455: error: Name "true" is not defined [name-defined]
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:456: error: Name "false" is not defined [name-defined]
}
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:489: error: Name "false" is not defined [name-defined]
}
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:490: error: Name "false" is not defined [name-defined]
}
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:494: error: Name "true" is not defined [name-defined]
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:496: error: Name "true" is not defined [name-defined]
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:499: error: Name "false" is not defined [name-defined]
}
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:500: error: Name "false" is not defined [name-defined]
}
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:554: error: Name "false" is not defined [name-defined]
}
2_Logistic_Regression_with_a_Neural_Network_mindset.ipynb:558: error: Name "false" is not defined [name-defined]
}
```

Explanation of error:

- In python, for assigning variable 1 bool value, we have to write "True" and for assigning variable 0 bool value, we have to write "False".