



# **Artificial Intelligence (Machine Learning & Deep Learning) [Course]**

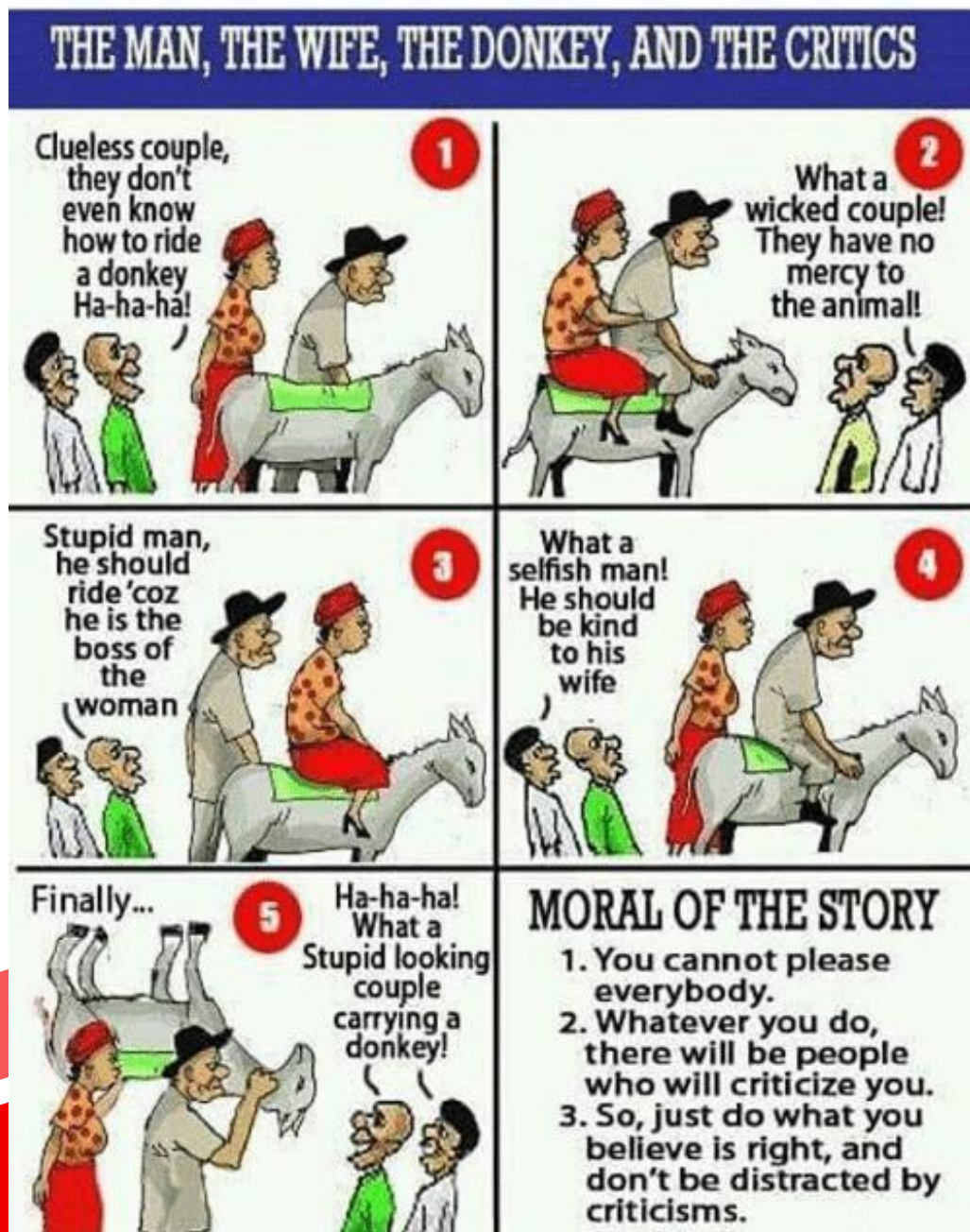
**Week 1 - Day 5**

**[See examples / code in GitHub code repository]**

**It is not about Theory, it is 20% Theory and 80% Practical –  
Technical/Development/Programming [Mostly Python based]**

# Motivation for exceling.....

- ❑ Success – is not round the corner, It is end of the road of struggle, efforts and constant hard work. Normally, success, take longer time, then we except. A true success, can take a long struggle, may be 5-7 years...in business or professional orientation. Just be consistent and continuous efforts – needed. Stay Strong. Stay Bold.
- ❑ Google: Entrepreneurship , because economic unrest, AI revolution, Everyone will be “Entrepreneur” or “Intrapreneur” or “Solopreneur”. Let's prepare for it.
- ❑ People talk, even without valid reason – so don't bother with others



Remember?

# Motivation for exceling – Part 2....

- ❑ Instead of being “Idealist” or “Perfectionist”, better to be “Progressive” means – small baby steps, daily and daily, that collectively become a big huge success. Just remember “small baby steps, daily and daily”
- ❑ Rational about AI , avoid nonsense critics , realization , positive use, productivity, being in control, Being in good control. That's only important
- ❑ Good sleep, is source of productivity , high results. There is no problem in consulting for it.
- ❑ Thoughts Management – Ideas processing Focus and refine and refine – OneNote – How create ac , Journals, Sections, pages

The screenshot shows a web browser window with the URL <https://onedrive.live.com/edit.aspx?resid=EC86D358D87507CDIs02eb2473a49d4f379a44d11ada0ab7fc&migratedtospo=true&wd=target%28I>. The document is titled 'MonthlyLog2025' and has a ribbon with 'File', 'Home', 'Insert', 'Draw', 'View', and 'Help' tabs. The 'Home' tab is active, showing a toolbar with various editing tools. The document content is organized into a table of contents on the left and a main editing area on the right.

MonthlyLog2025	
+ Add section	+ Add page
Euregio Academy Bun...	References
Ziaras-Sufsal	Notes
BaltiExpeditions-com	Week 1 – References
Zafar-California-Threa...	Week 1 – Material – Day 1
Jan	Week 1 – Day 2 - Linux p...
Jewellery manufacturi...	Week 1 – Day 3
Feb	Week 1 – Day 4
March	Week 1 – Day 5
ActiveThreads	Week 2 References
Nexskill-AI-ML-Instru...	Week 2 Material – Day 1
	Week 2 – Day 2
	Week 2 – Day 3
	Week 2 – Day 4

## Week 1 – References

Friday, March 14, 2025 4:02 PM

[https://www.tensorflow.org/install#:~:text=Python%203.8%E2%80%9311.or%20higher%20GPUs%20\(Experimental\)](https://www.tensorflow.org/install#:~:text=Python%203.8%E2%80%9311.or%20higher%20GPUs%20(Experimental))

<https://www.pluralsight.com/resources/blog/guides/installation-guide-for-tensorflow-20>

TensorFlow- 2.0 System Requirements  
<https://www.tensorflow.org/install>

Visual Studio Code:  
<https://code.visualstudio.com/docs/supporting/requirements>

Pycharm:  
<https://www.jetbrains.com/help/pycharm/prerequisites.html>

Anaconda:  
<https://www.anaconda.com/docs/getting-started/anaconda/system-requirements>  
<https://www.anaconda.com/docs/tools/ai-navigator/system-requirements>

=====  
tensorflow 2.0 known issues  
tensorflow 2.0 New features

# Linux commands

Don't have a Linux machine prepared. But there is a word round – semi-partial working. There are some linux commands – simulator. Few examples here:

## Reference:

<https://itsfoss.com/online-linux-terminals/>

Try: <https://copy.sh/v86/?profile=linux26&ref=itsfoss.com>

## How to get help of command

<https://www.linuxfordevices.com/tutorials/linux/help-command-in-linux>

## References:

<https://www.hostinger.com/tutorials/linux-commands>

<https://www.dreamhost.com/blog/linux-commands/>

<https://phoenixnap.com/kb/wp-content/uploads/2022/11/linuxCommandsAllUsersShouldKnow.pdf>

## Exercises

25



# python



# Important commands



## Top 50 Linux Commands you must know

- |           |            |             |                      |                           |
|-----------|------------|-------------|----------------------|---------------------------|
| 1. ls     | 11. cat    | 21. diff    | 31. kill and killall | 41. apt, pacman, yum, rpm |
| 2. pwd    | 12. echo   | 22. cmp     | 32. df               | 42. sudo                  |
| 3. cd     | 13. less   | 23. comm    | 33. mount            | 43. cal                   |
| 4. mkdir  | 14. man    | 24. sort    | 34. chmod            | 44. alias                 |
| 5. mv     | 15. uname  | 25. export  | 35. chown            | 45. dd                    |
| 6. cp     | 16. whoami | 26. zip     | 36. ifconfig         | 46. wheris                |
| 7. rm     | 17. tar    | 27. unzip   | 37. traceroute       | 47. whatis                |
| 8. touch  | 18. grep   | 28. ssh     | 38. wget             | 48. top                   |
| 9. ln     | 19. head   | 29. service | 39. ufw              | 49. useradd               |
| 10. clear | 20. tail   | 20. ps      | 40. iptables         | 50. passwd                |

## Exercises

25



# python

# Whole Week – Recap of whole week

Title	Notes File
Day 1	Artificial Intelligence (Machine Learning & Deep Learning)-Week1-Day1-Notes_Rev4.pdf
Day 2	Artificial Intelligence (Machine Learning & Deep Learning)-Week1-Day2-Notes_Rev1.pdf
Day 3	Artificial Intelligence (Machine Learning & Deep Learning)-Week1-Day3-Notes_Rev1.pdf
Day 4	Artificial Intelligence (Machine Learning & Deep Learning)-Week1-Day4-Notes_Rev1.pdf
Day 5	Artificial Intelligence (Machine Learning & Deep Learning)-Week1-Day5-Notes_Rev1.pdf

25



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# Assignment - Weekend

## String Manipulation

1. Write a program to create a new string made of an input string's first, middle, and last character.
2. Write a program to count occurrences of all characters within a string Given.
3. Reverse a given string
4. Split a string on hyphens
5. Remove special symbols / punctuation from a string

**Exercises**

25



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**Exercises**

25



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# Assignment - Weekend

## List Manipulation

1. Reverse a list in Python
2. Turn every item of a list into its square
3. Remove empty strings from the list of strings
4. Add new item to list after a specified item
5. Replace list's item with new value if found

**Exercises**

25



# Assignment - Weekend

## Dictionary Manipulation

1. Check if a value exists in a dictionary
2. Get the key of a minimum value from the following dictionary
3. Delete a list of keys from a dictionary

## Tuple Manipulation

1. Reverse the tuple
2. Access value 20 from the tuple
3. Swap two tuples in Python

**Exercises**

25



# Assignment - Weekend

## Loop Manipulation

1. Print first 10 natural numbers using while
2. Take Input from user , and print even number till that input number
3. Take Input from user , and print odd number till that input number
4. Take Input from user , and print prime number till that input number
- 5 Print multiplication table of a given number

25



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Thank you - for listening and participating

- ☐ Questions / Queries
- ☐ Suggestions/Recommendation
- ☐ Ideas.....?

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