Learn data science step by step in 6 months

Following is a schedule to learn data science step by step considering **4 hours** of dedicated, focused study every single day. This program is perfect for beginners with no knowledge of data science and programming.

Week 1 and 2: Excel and Statistics

* Excel
        - Google templates gallery for personal finance etc : https://docs.google.com/spreadsheets/u/0/?ftv=1
        - Budget planner: https://www.vertex42.com/ExcelTemplates/budgets.html
        - Chandoo's youtube channel: https://www.youtube.com/channel/UC8uU_wruBMHeeRma49dtZKA
        - Chandoo's website: https://chandoo.org/

* Statistics
        - Khan academy: https://www.khanacademy.org/math/statistics-probability
        - Khan academy youtube: https://www.youtube.com/playlist?list=PL1328115D3D8A2566
        - Statistics by Marin : https://www.youtube.com/playlist?list=PLqzoL9-eJTNBZDG8jaNuhap1C9q6VHyVa
        - Statquest youtube channel: https://www.youtube.com/user/joshstarmer

Week 3 and 4: Python

* Python
        - Codebasics python tutorials (first 16) - https://www.youtube.com/playlist?list=PLeo1K3hjS3uv5U-Lmlnucd7gqF-3ehIh0
        - Codebasics python HINDI tutorials (first 16)- https://www.youtube.com/playlist?list=PLPbgcxheSpE1DJKfdko58_AIZRIT0TjpO
        - Make sure to work on exercises
* R
  - Marin's lectures: https://www.youtube.com/playlist?list=PLqzoL9-eJTNBlVXxWvJkq0dtVut2sICUW

Week 5, 6, 7, 8: Numpy, Pandas, Data Visualization Libraries

* NumPy and Pandas
        - Codebasics Numpy playlist: https://www.youtube.com/playlist?list=PLeo1K3hjS3uset9zIVzJWqplaWBiacTEU
        - Codebasics pandas playlist (first 9): https://www.youtube.com/playlist?list=PLeo1K3hjS3uuASpe-1LjfG5f14Bnozjwy

* Visualization library

- Matplotlib: codebasics matplotlib playlist:
https://www.youtube.com/playlist?list=PLeo1K3hjS3uu4Lr8_kro2AqaO6CFYgKOl
- Seaborn: codebasics seaborn tutorials:
https://www.youtube.com/playlist?list=PLJIOr9Je9wzHT-ptgfelpt2Nyx4VGX_j9

* Kaggle exploratory data analysis
- Notebooks: https://www.kaggle.com/notebooks
- Datasets: https://www.kaggle.com/datasets

Week 9, 10, 11, 12: Machine Learning

* Machine learning
- codebasics ml playlist (first 16):
https://www.youtube.com/playlist?list=PLeo1K3hjS3uvCeTYTeyfe0-rN5r8zn9rw
- data science regression project: same playlist as above. Tutorial 18 to 25
- HINDI codebasics ml playlist (first 14):
https://www.youtube.com/playlist?list=PLPbgcxheSpE0aBsefANDYe2X_-tyJbBMr

Week 13, 14, 15, 16: Deep Learning

* Deep learning   (artificial neural network, convolutional neural network, recurrent neural network)
  - codebasics deep learning playlist:
https://www.youtube.com/playlist?list=PLeo1K3hjS3uu7CxAacxVndI4bE_o3BDtO

Week 17, 18, 19, 20: SQL & MongoDB

* SQL
- kudavenkat playlist (first 16):
https://www.youtube.com/playlist?list=PL08903FB7ACA1C2FB
- khanacademy SQL course: https://www.khanacademy.org/computing/computer-programming/sql

* MongoDB
  - https://www.coursera.org/learn/introduction-mongodb

Week 21, 22, 23, 24: BI tools

* Tableau
  - Codebasics sales insights project:
https://www.youtube.com/playlist?list=PLeo1K3hjS3usDI9XeUgjNZs6VnE0meBrL
  - HINDI codebasics sales insights project:
https://www.youtube.com/playlist?list=PLPbgcxheSpE2B7YFfOualUTlRhgnQR7Kn
  - Abhishek Agarwal:
https://www.youtube.com/playlist?list=PL6_D9USWkG1C4raCOTlTf_oq4XnNNNtm9
  - Bharti consultancy:
https://www.youtube.com/playlist?list=PLyD1XCIRA3gQmN73dHwQWr4R08ABZFMtZ

* Power BI (project)
  - codebasics sales insights project:
https://www.youtube.com/playlist?list=PLeo1K3hjS3uva8pk1FI3iK9kCOKQdz1I9
  - personal finance management project:
https://www.youtube.com/watch?v=pqSoCa2NGj4

Soft skills
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* Learn anything effectively: https://www.youtube.com/watch?v=yZFrSDjRvjk

* Group learning
        - Codebasics discord server: https://discord.gg/r42Kbuk
        - Hold each other accountable

Books and other resources
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* Free book on statistics: http://greenteapress.com/thinkstats/thinkstats.pdf
* Another good book on statistics (not free) Naked Statistics - Charles Wheelan