An Insight into ANTLR(antlr)/jEdit/NetBeans/Eclipse/Java/JVM/JikesRVM/OSGi as Bio-informatics Platform in the Context of DNA/RNA Sequencing & Gene Chip Design – A Simple & Interesting Suggestion towards Interfacing Nano-Bio Systems /IoT Hardware & Software/ HPC Environments.

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[I] Introduction & Inspiration :

https://www.osapublishing.org/boe/viewmedia.cfm?uri=boe-1-5-1302&seq=0
http://www.scienpress.com/Upload/JAMB/Vol%202_2_6.pdf

https://pubs.rsc.org/en/content/articlelanding/2015/cc/c4cc10047f#!divAbstract
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5522603/
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6163985/

https://www.mdpi.com/2077-0383/8/1/6/htm
https://www.sciencedirect.com/science/article/pii/S030100821530099X
https://pubs.acs.org/doi/abs/10.1021/ac0487449

http://www.globalhealthprimer.emory.edu/targets-technologies/nucleic-acid-based-diagnostics.html
https://en.wikipedia.org/wiki/DNA_nanotechnology
https://explained.ai/ - Good information.

https://arxiv.org/pdf/1802.01528.pdf - The Matrix Calculus You Need For Deep Learning .
https://en.wikipedia.org/wiki/DNA_microarray
https://learn.genetics.utah.edu/content/labs/microarray/

https://en.wikipedia.org/wiki/Patrick_O._Brown
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4479227/
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4011503/

http://www.cs.mun.ca/~harold/Courses/Old/CS6754.W06/Diary/ng1030.pdf
http://textofvideo.nptel.ac.in/102101054/lec33.pdf

https://www.m2-automation.com/
https://genome.cshlp.org/content/13/3/467.full
https://www.comsol.co.in/paper/download/364251/jindal_presentation.pdf
http://www.ipcsit.com/vol2/38-A313.pdf

[II] Informatics Framework & Implementation :
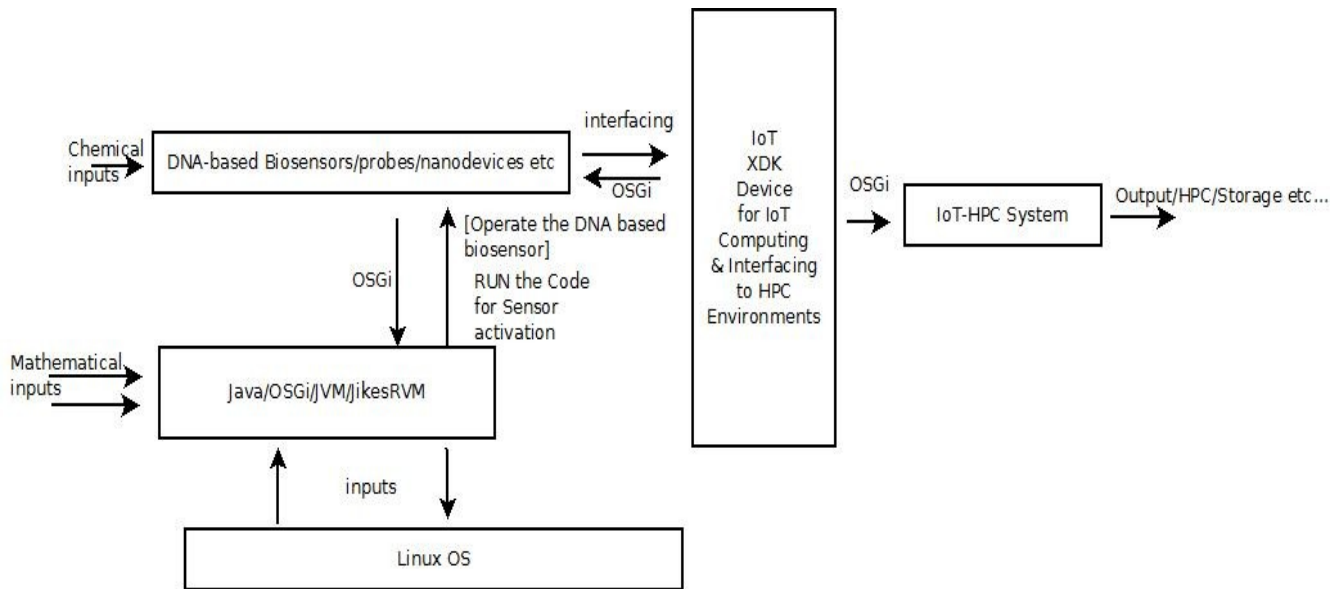
Figure I – Our Total Idea as mentioned in our TITLE. Simple Suggestion.
*** Please Check - with the available Hardware/Software/Algorithms and other necessary infrastructure.Here we are referring to Bosch XDK IoT Platform interfacing with DNA Microarray/DNA Chips etc but there exist other platforms as well.
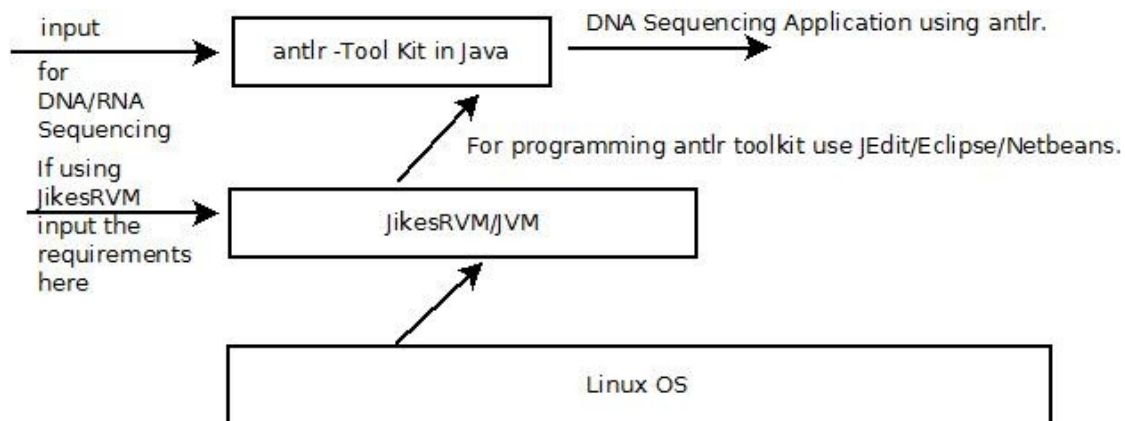
Figure II – antlr based Bio-informatics Framework .

[III] Conclusion With Future Perspectives :

    A **Simple Bio-informatics Platform** was proposed and suggested.
<div align="center">[Testing in Progress]</div>

[IV] Acknowledgment/s :

[V] References :

https://netbeans.org/

https://www.antlr.org/tools.html

https://github.com/antlr/antlr4

https://www.eclipse.org/downloads/

https://xdk.bosch-connectivity.com/

https://www.bosch-connectivity.com/products/cross-domain-developement-kit/

https://evothings.com/doc/examples/bosch-xdk-sensors.html

https://github.com/bsinno/XDK-Demo-App/blob/master/doc/Guides/dev_guide.md

https://github.com/topics/bosch?o=asc&s=updated

https://developer.bosch.com/web/xdk/programming-in-c

https://media.digikey.com/pdf/Data%20Sheets/Bosch/XDK_Br.pdf

https://cloud.oracle.com/en_US/iaas - [HPC on Oracle Cloud Infrastructure]

https://cloud.oracle.com/iaas/hpc

https://ieeexplore.ieee.org/document/8116570

http://www.jcuda.org/ && https://github.com/jcuda/jcuda-main

https://github.com/jcuda/jcuda

https://www.nvidia.in/object/cuda-parallel-computing-in.html

https://www.mcobject.com/iot-edge/ && https://www.iot-lab.info/deployment/grenoble/

http://www.jedit.org/

<div align="center">**THE END.**</div>