

Count for 1st set of labs: Total labs: 20, Sources Available: 13, Partially Available: 4 , Not Available: 3 , Labs are at level 6: 9 , Labs are at level 4: 4

Sr. No	Lab Id	Lab Name	Number of experiments	Client side Dependencies	Sources status	Integration Level	Current Status of labs							
1	CSE01	Data Structures	9	Adobe flash plugin	Partially Available (fla files are not Available for last 5 experiments)									
2	CSE02	Computer Programming	10	Icedtea plugin,JRE (1.7.0-65)	Available	6								
3	CSE11	Computer Organization	9	Java(1.7.0-65),Icedtea Plugin, Flash	Partially Available (need java for 3rd experiment & fla for 1,2 & the last experiment.)									
4	CSE04	Problem Solving	10	None	Available	6								
5	CSE07	Databases	10	None	Available	4								
6	CSE15	Digital Logic Design	10	icedtea plugin,Java (1.7.0-65)	Available	6								
7	CSE19	Image Processing	11	None	Available	6								
8	CSE18	Computer Graphics	11	Java(1.7.0-65),Icedtea Plugin	Available	4[need to host with updated source]								
9	CSE20	Pattern Recognition	8	Java(1.7.0-65),Icedtea Plugin	Not Available (Need java for all the experiments.)									
10	CSE06	Data Mining	11	None	Available	4								
11	CSE29	Cryptography	10	None	Available	6								
12	CSE22	Artificial Neural Networks	10	Java(1.7.0-65),Icedtea Plugin	Available	6								
13	CSE14	VLSI	10	Java, WaveForm	Available	6								
14	EERC01	Basic Engineering Mechanics and Strength of Materials	10	Java(1.7.0-65),Icedtea Plugin (1.7.65), Java3D(1.5.2), Flash	Partially Available (Need fla for 4th experiment and java for 9th experiment)	[test the java3d exp and rehost the lab]								
15	EERC03	Hydraulics and Fluid Mechanics	10	Java(1.7.0-65),Icedtea Plugin (1.7.65), Java3D(1.5.2), Flash	Available	6								
16	CCNSB06	Physical Chemistry	10	Adobe Flash Plugin and Java(1.6),Java3D(1.5.2) and Flash	Not Available									
17	PHY14	Physical Sciences	9	Java, Java3D 1.5.2 and Flash	Partially Available (Need Java files for 6 expts)									
18	CSE05	Principles of Programming Languages	9	None	Available	4								
19	CSE09	Linux Lab	9	None	Available	4								

S.No	Lab Id	Lab Name	List of Experiments	Client side Dependencies	java	python	js	perl	fla	js	py	gsp	c	m	Source code required or not (Yes/No)	sources #177 (BibTex/Citation)	Analysis Year	Unique visitors	Number of visits	Pages	Hits
1	CSE01	Data Structures	1. Number systems 2. Expression Evaluation using Stack 3. Sorting using arrays 4. Polynomials via Linked Lists 5. Expression Trees 6. Search Trees 7. Graph Traversals 8. Shortest Path Trees 9. Minimum Spanning Trees	adtlib flash plugin adtlib flash plugin adtlib flash plugin adtlib flash plugin adtlib flash plugin adtlib flash plugin adtlib flash plugin adtlib flash plugin adtlib flash plugin	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available	Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	YES (Required fl) YES (Required fl) YES (Required fl) YES (Required fl) YES (Required fl) YES (Required fl) YES (Required fl) YES (Required fl) YES (Required fl)	Source (fl files for all the experiments) are not available in bibtext and its content.	2014 2015	=> 16,907 => 418	21,186 602	318,489 6,306	1,262,370 17,303	
2	CSE02	Computer Programming	1. Expression Evaluation 2. Basic Control Flow 3. Advanced Control Flow 4. Arrays 5. Functions 6. Recursion 7. Structures 8. Strings 9. Pointers 10. Numerical Approximation	adtlib flash plugin, JRE (1.7.0-65) adtlib flash plugin, JRE (1.7.0-65) adtlib flash plugin, JRE (1.7.0-65) adtlib flash plugin, JRE (1.7.0-65) adtlib flash plugin, JRE (1.7.0-65) adtlib flash plugin, JRE (1.7.0-65) adtlib flash plugin, JRE (1.7.0-65) adtlib flash plugin, JRE (1.7.0-65) adtlib flash plugin, JRE (1.7.0-65) adtlib flash plugin, JRE (1.7.0-65)	Available Available Available Available Available Available Available Available Available Available	Available Available Available Available Available Available Available Available Available Available	Not Available Not Available Not Available Not Available Not Available Not Available Not Available Not Available Not Available Not Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	NO NO NO NO NO NO NO NO NO NO	Sources are available for all the experiments.	2014 2015	=> 1,737 => 378	3,545 816	24,826 8,823	118,806 17,675		
3	CSE11	Computer Organization	1. Representation of Integers and their Arithmetic 2. Representation of Floating Point Numbers and their Arithmetic 3. Cache Organizations 4. Virtual Memory 5. MIPS Assembly Language Programming - 1 6. MIPS Assembly Language Programming - 2 7. ARM Assembly Language Programming - 1 8. ARM Assembly Language Programming - 2 9. Single Cycle MIPS CPU	Java(1.7.0-65),adtlib Plugin, Flash Java(1.7.0-65),adtlib Plugin, Flash Java(1.7.0-65),adtlib Plugin, Flash Java(1.7.0-65),adtlib Plugin, Flash Java(1.7.0-65),adtlib Plugin, Flash Java(1.7.0-65),adtlib Plugin, Flash Java(1.7.0-65),adtlib Plugin, Flash Java(1.7.0-65),adtlib Plugin, Flash Java(1.7.0-65),adtlib Plugin, Flash Adobe Flash	Not Applicable Not Applicable Not Available Available Available Available Available Available Available Available Not Applicable	Not Applicable Not Applicable Not Available Available Available Available Available Available Available Available Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Not Available Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Available	Not Available Not Available Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Available	Available Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	YES (Required fl) YES (Required fl) YES (Required java) NO NO NO NO NO NO NO NO YES (Required fl)	Source (java for 3rd experiment & fls for 2,3 & 9 experiments) are not available in bibtext and its content.	2014 2015	=> 545 => 147	1231 193	8135 947	27,446 3685		
4	CSE04	Problem Solving	Numerical Representation Beauty of Numbers More on Numbers Factorials String Operations Recursion Advanced Arithmetic Searching and Sorting Permutation Sequences	None None None None None None None None None None	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	NO NO NO NO NO NO NO NO NO NO	Sources are available for all the experiments.	2014 2015	=> 1,483 => 1,699	3,748 7306	16,494 107,252	66,749 152,192		
5	CSE07	Databases	ER Model Enhanced ER Model Relational Model 1st Normal Form 2nd Normal Form 3rd Normal Form Boyce-Codd Normal Form SQL - 1 SQL - 2 SQL - 3	None None None None None None None None None None	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	NO NO NO NO NO NO NO NO NO NO	Sources are available for all the experiments.	2014 2015	=> 16 => 129	16 141	44 527	240 2,117		
6	CSE15	Digital Logic Design	Adder Circuit Multiplexer Decoder with 7-Segment Display ALU with function Comparator Latch and Flip Flaps Registers Counters Multiplexer State Diagram	adtlib flash plugin, Java (1.7.0-65) adtlib flash plugin, Java (1.7.0-65) adtlib flash plugin, Java (1.7.0-65) adtlib flash plugin, Java (1.7.0-65) adtlib flash plugin, Java (1.7.0-65) adtlib flash plugin, Java (1.7.0-65) adtlib flash plugin, Java (1.7.0-65) adtlib flash plugin, Java (1.7.0-65) adtlib flash plugin, Java (1.7.0-65) adtlib flash plugin, Java (1.7.0-65)	Available Available Available Available Available Available Available Available Available Available	Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	NO NO NO NO NO NO NO NO NO NO	Sources are available for all the experiments.	2014 2015	=> 4,881 => 2,278	6,514 2,813	32,754 12,530	193,844 74,554		
7	CSE19	Image Processing	Distance and Connectivity Image Arithmetic Affine Transformation Point Operations Neighbourhood Operations Image Histogram Fourier Transform Color Image Processing Morphological Operations Image Segmentation Image Processing Test Bench	None None None None None None None None None None None	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	NO NO NO NO NO NO NO NO NO NO NO	Sources are available for all the experiments.	2014 2015	=> 1,397 => 497	2,827 728	34,776 11,034	124,972 32,286	
8	CSE18	Computer Graphics	Points and Co-ordinate Systems Transformations: Translation Transformations: Rotation Transformations: Scaling Hierarchical Transformations: 2D Demo Hierarchical Transformations: 3D Attended Aim Projections and Cameras Clipping Line Clipping Polygon Rasterization Line Rasterization Polygon	Java(1.7.0-65),adtlib Plugin Java(1.7.0-65),adtlib Plugin Java(1.7.0-65),adtlib Plugin Java(1.7.0-65),adtlib Plugin Java(1.7.0-65),adtlib Plugin Java(1.7.0-65),adtlib Plugin Java(1.7.0-65),adtlib Plugin Java(1.7.0-65),adtlib Plugin Java(1.7.0-65),adtlib Plugin Java(1.7.0-65),adtlib Plugin	Available Available Available Available Available Available Available Available Available Available Available Available	Available Available Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Available Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Available Not Available Not Available Not Available Not Available Not Available Not Available Not Available Not Available Not Available Not Available Not Available	Available Available Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	NO NO NO NO NO NO NO NO NO NO NO NO	Sources are available for all the experiments.	2014 2015	=> 623 => 199	1,371 308	12,195 2,424	36,614 7,773		
9	CSE20	Pattern Recognition	Feature Representation Mean and Covariance Linear Perceptron Learning Generation of Random Variables Bayesian Classification MLE: Learning the classifier from data From 2-class to multiclass Data Clustering: K-Means, MST-based	Java(1.7.0-65),adtlib Plugin Java(1.7.0-65),adtlib Plugin Java(1.7.0-65),adtlib Plugin Java(1.7.0-65),adtlib Plugin Java(1.7.0-65),adtlib Plugin Java(1.7.0-65),adtlib Plugin Java(1.7.0-65),adtlib Plugin Java(1.7.0-65),adtlib Plugin	Not Available Not Available Not Available Not Available Not Available Not Available Not Available Not Available Not Available	Not Available Not Available Not Available Not Available Not Available Not Available Not Available Not Available Not Available	Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	YES (Required java) YES (Required java) YES (Required java) YES (Required java) YES (Required java) YES (Required java) YES (Required java) YES (Required java) YES (Required java)	Source (java for all the experiments) are not available in bibtext and its content.	2014 2015	=> 286 => 187	647 274	3,983 3,828	11,446 8,864		
10	CSE06	Data Mining	Apriori (An association rule mining algorithm) Sampling (An association rule mining algorithm) Partition (An association rule mining algorithm) Comparison of Association Rule Mining Algorithms k-Means (A partitioning clustering algorithm) Agglomerative Clustering (A hierarchical clustering algorithm) DBSCAN (A density-based clustering algorithm) KNN (A nearest neighbour based classification algorithm) Decision Tree (Classification algorithm) Comparison of Classification algorithms	None None None None None None None None None None	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	NO NO NO NO NO NO NO NO NO NO	Sources are available for all the experiments.	2014 2015	=> 28 => 567	21 649	54 3,022	241 18,265		

S.No	Lab Id	Lab Name	List of Experiments	Client side Dependencies	java	.class	.jar	.jlp	.swf	.fla	.js	.py	.php	.c	.m	Source code required or not (Yes/No)	sources at?? (Bitbucket/Container)	Analytics Year	Unique visitors	Number of visits	Pages	Hits	
11	CSE29	Cryptography	Breaking the Shift Cipher Breaking the Mono-alphabetic Substitution Cipher One-Time Pad and Perfect Secrecy Message Authentication Codes Cryptographic Hash Functions and Applications Symmetric Key Encryption Standards (DES) Asymmetric Key Encryption Standards (RSA) Diffie-Hellman Key Establishment Public-Key Cryptosystems (PKCSv1.5) Digital Signatures	None None None None None None None None None None	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	NO NO NO NO NO NO NO NO NO NO	Sources are available for all the experiments	2014 2015	↔ 751 ↔ 383	1627 559	18127 5966	56308 16854		
12	CSE22	Artificial Neural Networks	Parallel and distributed processing - I Interactive activation and competition models Parallel and distributed processing - II Constant satisfaction neural network models Perceptron learning Multilayer feedforward neural networks Hopfield model for pattern storage task Hopfield model with stochastic update Competitive learning neural networks for pattern clustering Solution to travelling salesman problem using self organizing maps Solution to optimization problems using Hopfield models Weighted matching problem Deterministic, stochastic and mean-field annealing of an Hopfield model	Java1.7 8-65Jenkins Plugin Java1.7 8-65Jenkins Plugin None None Java1.7 8-65Jenkins Plugin Java1.7 8-65Jenkins Plugin None None None None None None	Available Available Available Available Not Applicable Not Applicable Not Applicable Available Available Available Available Available Available	Available Available Available Available Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	NO NO NO NO NO NO NO NO NO NO NO NO NO NO	Sources are available for all the experiments	2014 2015	↔ 345 ↔ 172	729 222	6809 2225	27167 9317						
13	CSE14	VLSI	Schematic Design Of Transistor Level Inverter Schematic Design Of Transistor Level NAND & NOR Gate Schematic Design Of Transistor Level NOR & XOR Gate Schematic Design Of Pass Transistor Logic & Multiplexer Delay Estimation in Chain Of Inverters Schematic Design OF D-Latch and D-Flip Flop Spec Code Platform Design OF D-Flip Flop Using Verilog Design OF Digital Circuits Using Verilog Layout Design	Java, Waveform Java, Waveform Java, Waveform Java, Waveform Java, Waveform Java, Waveform Java, Waveform None Java, Waveform	Available Available Available Available Available Available Available Not Applicable Available	Available Available Available Available Available Available Available Not Applicable Not Applicable	Available Available Available Available Available Available Available Not Applicable Not Applicable	Available Available Available Available Available Available Available Not Applicable Not Applicable	Available Available Available Available Available Available Available Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	NO NO NO NO NO NO NO NO NO	Sources are available for all the experiments	2014 2015	↔ 954 ↔ 698	1871 878	5964 4315	54651 35280					
14	EERC01	Basic Engineering Mechanics Strength of Materials	Tensile Test Experiment Compression Test Experiment Shear Test Experiment Torsion Test Experiment Impact Test Experiment Creep Test Experiment Fatigue Test Experiment Compression Test on Spring Experiment Principal Stresses Experiment Rockwell Hardness Experiment	Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash	Available Available Available Available Available Available Available Available Available Available Not Available	Available Available Available Available Available Available Available Available Available Available Not Available	Available Available Available Available Available Available Available Available Available Available Available	Available Available Available Available Available Available Available Available Available Available Available	Available Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	YES YES YES YES (Required .fla) YES YES YES YES YES YES (Required .java)	Sources (.fla for 4th experiment & .java for the last experiment) are not available in Bitbucket and in container	2014 2015	↔ 2,234 ↔ 1,389	3,992 1,682	32623 12514	109472 42783			
15	EERC03	Hydraulics and Fluid Mechanics	Bernoulli's Experiment Venturi Meter Experiment Orifices Experiment Mouthpieces Experiment Weirs Experiment Channels Experiment Reynold's Experiment Venturi's Experiment Jen Experiment Turbines Experiment	Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash Java1.7 8-65Jenkins Plugin (7.65), JavaDX1.5.2, Flash	Available Available Available Available Available Available Available Available Available Available Available	Available Available Available Available Available Available Available Available Available Available Available	Available Available Available Available Available Available Available Available Available Available Available	Available Available Available Available Available Available Available Available Available Available Available	Available Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	NO NO NO NO NO NO NO NO NO NO NO	Sources are available for all the experiments	2014 2015	↔ 1,097 ↔ 856	2,146 1,094	19826 10977	73609 38569			
16	CSCN80	Physical Chemistry	Instrumentation and working principles of infra red (IR) spectroscopy using salt plates Instrumentation and working principles of solutions infra red (IR) spectroscopy Instrumentation and working principles of mass spectroscopy Determination of molar mass of simple compounds using mass spectroscopy Nuclear magnetic resonance spectroscopy and evaluation of simple 1H NMR spectra of select organic compounds Identification of unknown compounds using spectroscopic techniques Principles of electron paramagnetic resonance spectroscopy Electron paramagnetic resonance spectral studies of select organic free radicals (EPR vs ESR Techniques in Transition Metal Complex) Construction of a Electrochemical Cells (Cyclic Voltammetry)	Adobe Flash Plugin Adobe Flash Plugin Adobe Flash Plugin Adobe Flash Plugin Adobe Flash Plugin Adobe Flash Plugin Java1.6Jenkins Plugin (7.65) and Flash Java1.6Jenkins Plugin (7.65) and Flash Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Available Not Available Not Available Not Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Available Not Available Not Available Not Available	Available Not Available Not Available Available Not Available Not Available Not Available Not Available Not Available Not Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	NO YES (Required .fla) YES (Required .fla) YES (Required .fla) YES (Required .fla) YES (Required .fla) YES (Required .fla & .java) YES (Required .fla & .java) YES (Required .fla) YES (Required .fla)	Sources (.fla for all the experiments except for 1st experiment & .java for 7th & 8th experiment) are not available in Bitbucket and in container	2014 2015	↔ 409 ↔ 176	915 234	4267 1157	22386 6879					
17	PHY14	Physical Sciences	Measurement of Dipole Moment Millikan's Experiment Photoelectric Effect Inversion of Cane Sugar Heat of Neutralization Acid-Base Indicators Young's Muller Counter Feyn's Modulus Surface Tension	Java, JavaDX1.5.2 and Flash Java, JavaDX1.5.2 and Flash Java, JavaDX1.5.2 and Flash Java, JavaDX1.5.2 and Flash Java, JavaDX1.5.2 and Flash Java, JavaDX1.5.2 and Flash Java, JavaDX1.5.2 and Flash Java, JavaDX1.5.2 and Flash Java, JavaDX1.5.2 and Flash	Available Available Available Available Available Available Available Available Available	Available Available Available Available Available Available Available Available Available	Available Available Available Available Available Available Available Available Available	Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	YES (Required .java & .fla) YES (Required .java & .fla) YES (Required .java & .fla) YES (Required .java & .fla) YES (Required .java & .fla) YES (Required .java & .fla) YES (Required .java & .fla) YES (Required .java & .fla) YES (Required .java & .fla)	Sources (.java & .fla for all the experiments & not for last two experiments) are not available in Bitbucket and in container	2014 2015	↔ 1,708 ↔ 391	3,500 547	19121 2705	108773 14003			
18	CSE05	Principles of Programming Languages	Design Inductive Data Programming with Inductive Data Higher-Order Functions Arithmetic Interpreter Environment Block-Structured Language Language with Closures Language with Recursive Functions Language with Objects	None None None None None None None None None	Available Available Available Available Available Available Available Available Available	Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Available Not Available Not Available Not Available Not Available Not Available Not Available Not Available Not Available	Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	NO NO NO NO NO NO NO NO NO	Sources are available for all the experiments	2014 2015	↔ 488 ↔ 787	1413 996	5640 4280	9812 8189			
19	CSE09	Linux Lab	File Management Text Editor File Content File Permissions Archival and Compression	None None None None None	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	NO NO NO NO NO	Sources are available for all the experiments	2014 2015	↔ 1,921 ↔ 2,819	3,643 3042	38226 18839	157533 97773		

S.No	Lab Id	Lab Name	List of Experiments	Client side Dependencies	java	python	perl	php	swift	fla	js	py	gsp	c	an	Source code required or not (Yes/No)	Source code #77 (Bitbucket/Container)	Analysis Year	Unique visitors	Number of visits	Pages	Hits	
			Obtaining System Information	None	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	NO							
			Pipes and Redirection	None	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	NO							
			Searching	None	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	NO							
			Basic Networking	None	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	NO							
20	EMT	EM Theory	Coulomb's Law	java (1.6.0.45), OpenJDK Runtime Environment (jre7fu 2.5.3), Java 3D (1.5.2)	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES (Required: java)	Source: java for all the experiments) are not available in bitbucket and in container	2014	↔ 952	2022	10225	75823	
			Electrostatic Fields I	java (1.6.0.45), OpenJDK Runtime Environment (jre7fu 2.5.3), Java 3D (1.5.2)	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES (Required: java)		2015	↔ 294	533	2554	18765	
			Electrostatic Fields II	java (1.6.0.45), OpenJDK Runtime Environment (jre7fu 2.5.3), Java 3D (1.5.2)	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES (Required: java)							
			Boundary Conditions	java (1.6.0.45), OpenJDK Runtime Environment (jre7fu 2.5.3), Java 3D (1.5.2)	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES (Required: java)							
			Electric Field in Material Space	java (1.6.0.45), OpenJDK Runtime Environment (jre7fu 2.5.3), Java 3D (1.5.2)	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES (Required: java)							
			Magnetostatic Fields	java (1.6.0.45), OpenJDK Runtime Environment (jre7fu 2.5.3), Java 3D (1.5.2)	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES (Required: java)							
			Application of Faraday's Laws	java (1.6.0.45), OpenJDK Runtime Environment (jre7fu 2.5.3), Java 3D (1.5.2)	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES (Required: java)							
			Wave Propagation	java (1.6.0.45), OpenJDK Runtime Environment (jre7fu 2.5.3), Java 3D (1.5.2)	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES (Required: java)							
			Distance and Altitude Measurement	java (1.6.0.45), OpenJDK Runtime Environment (jre7fu 2.5.3), Java 3D (1.5.2)	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES (Required: java)							
			Plane Waves - Reflection and Refraction	java (1.6.0.45), OpenJDK Runtime Environment (jre7fu 2.5.3), Java 3D (1.5.2)	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES (Required: java)							
Second Set of Labs																							
S.NO	Lab Id	Lab Name	List of Experiments	Client side Dependencies	java	python	perl	php	swift	fla	js	py	gsp	c	an	Source code required or not (Yes/No)	Source code #77 (Bitbucket/Container)	Analysis Year	Unique visitors	Number of visits	Pages	Hits	
	CSE24	Natural Language Processing	1. Word Analysis 2. Word Generation 3. Morphology 4. N-Grams 5. N-Grams Smoothing 6. POS Tagging: Hidden Markov Model 7. POS Tagging: Viterbi Decoding 8. Building POS Tagger 9. Chunking 10. Building Chunker	None None None None None None None None None None	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Not Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	NO NO NO NO NO NO NO NO NO NO	Source: java for all the experiments.	2014 2015	↔ 148 ↔ 255	281 297	2204 2209	6619 7051
2	CNSB02	Colloid and Surface Chemistry	Preparation of Sols Preparation of Gels Demonstration of the Preparation and Use of Association Colloids (Micelles) Demonstration of Critical Micelle Concentration (CMC) of a Surfactant Demonstration of the Surface Tension Lowering of Water by Surfactants Demonstration of Tyndall Effect of Tyndall Scattering in Colloidal Systems Gel Electrophoresis Demonstration of the Surface-Effect on Chemical Properties of Finely Divided Particles Study of the Catalytic Effects of Finely Divided Particles	Adobe Flash Plugin Adobe Flash Plugin Adobe Flash Plugin Adobe Flash Plugin Adobe Flash Plugin Adobe Flash Plugin Adobe Flash Plugin Adobe Flash Plugin Adobe Flash Plugin	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	YES (Required: fla) YES (Required: fla) YES (Required: fla) YES (Required: fla) YES (Required: fla) YES (Required: fla) YES (Required: fla) YES (Required: fla) YES (Required: fla)	Source: fla file for 1,2,3,5,6,8,9 experiments are not available in bitbucket and in container	2014 2015	↔ 254 ↔ 215	451 257	2184 824	9160 5297	
			Molecular Absorption Spectroscopy	Familiarization with the UV-Visible Absorption Spectroscopy (a) Principles of UV-visible absorption spectroscopy. Electronic excitation/transition and light absorption (b) The working principles of a UV-visible spectrophotometer (c) Absorption (and transmittance) measurements of a colourless and a coloured light absorbing substance (d) Solvent effects on absorption spectra	Adobe Flash Plugin Adobe Flash Plugin	Not Applicable Not Applicable	Not Applicable Not Applicable	Not Applicable Not Applicable	Not Applicable Not Applicable	Not Applicable Not Applicable	Not Applicable Not Applicable	Not Applicable Not Applicable	Not Applicable Not Applicable	Not Applicable Not Applicable	Not Applicable Not Applicable	Not Applicable Not Applicable	YES NO	Source: fla file for 1,3,4 experiments are not available in bitbucket and in container.	2014 2015	↔ 190 ↔ 385	404 443	1829 1685	11848 13487
3	CNSB03		Effects of sample path length	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	YES	Source: fla file for 1,3,4 experiments are not available in bitbucket and in container.	2014 2015	↔ 190 ↔ 385	404 443	1829 1685	11848 13487
			Effects of sample concentration	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	YES						
			Determination of molar absorptivity	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NO						
			Verification of Beer-Lambert Law	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NO						
			Determination of unknown concentration of a light absorbing analyte	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NO						
			Simultaneous estimation method for multicomponent samples. Principle of additivity of absorbance	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NO						
			pH effects on absorption spectra, pKa determination by spectrophotometric method	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NO						
			Study of kinetics of a reaction by using spectrophotometric method	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NO						
4	CNSB07	Molecular Interactions	Intermolecular forces in a diatomic molecule: Optical and magnetic tweezers experiments Molecular forces in a triatomic molecule: A magnetic tweezers experiment Dihedral forces in a quadratomic molecule: A magnetic tweezers experiment Interatomic van der Waals forces van der Waals forces between molecules Interatomic electrostatic forces Electrostatic forces between molecules Many-body forces in a polyatomic molecule Solvent viscous forces on a polyatomic molecule Molecular separation using interatomic forces: Column chromatography Radiation forces on a dielectric particle	Java 3D, Java, Jre7fu Plugin Java 3D, Java, Jre7fu Plugin Java 3D, Java, Jre7fu Plugin Java 3D, Java, Jre7fu Plugin Java 3D, Java, Jre7fu Plugin Java 3D, Java, Jre7fu Plugin Java 3D, Java, Jre7fu Plugin Java 3D, Java, Jre7fu Plugin Java 3D, Java, Jre7fu Plugin Java 3D, Java, Jre7fu Plugin	Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available	Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available	Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available	Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available	Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available	Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available	Available Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	YES YES YES YES YES YES YES YES YES YES	Source: java for 1-10 experiments are not available in bitbucket and in container.	2014 2015	↔ 288 ↔ 238	506 269	2634 1170	12493 6624	
5	EERC05	Geotechnical Engineering Lab	Fire Steel Index Experiment California Bearing Ratio Test (CBR Test) pH Test Determination of Total Soluble Solids Cure Cutter Experiment Vane Shear Test Tensile Splitting Test Standard Penetration Test Plate Load Test	Flash Plugin, Jre7fu plugin and java 3D Flash Plugin, Jre7fu plugin and java 3D Flash Plugin, Jre7fu plugin and java 3D Flash Plugin, Jre7fu plugin and java 3D Flash Plugin, Jre7fu plugin and java 3D Flash Plugin, Jre7fu plugin and java 3D Flash Plugin, Jre7fu plugin and java 3D Flash Plugin, Jre7fu plugin and java 3D Flash Plugin, Jre7fu plugin and java 3D	Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available	Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available	Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available	Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available	Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available	Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available	Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available	Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available	Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available	Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available	YES YES YES YES YES YES YES YES YES YES	Source: java for all the 9 experiments are not available in bitbucket and in container.	2014 2015	↔ 695 ↔ 1,090	1396 1312	10429 7360	36759 31782		
6	CSE23	Computational Linguistics	Forming Sentences-1 Forming Sentences-2 Tokens and Types Happ's Law Dictionary Generation Course-grained POS Tagging Fine-grained POS Tagging Chunking Context Free Grammar	None None None None None None None None None	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Available Available Available Available Available Available Available Available Available	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	NO NO NO NO NO NO NO NO NO	Source: java for all the experiments.	2014 2015	↔ 8 ↔ 6	44 96	100 791	100 2287	
7	EERC06	Structural Dynamics	Simple Harmonic Oscillator Free Vibration of Single Degree of Freedom System	Flash, Java and Jre7fu plugin Java 3D, Flash, Java and Jre7fu plugin	Not Applicable Available	Not Applicable Available	Available Available	Available Available	Available Available	Not available Not available	Available Available	Not Applicable Not Applicable	Available Available	Not Applicable Not Applicable	Not Applicable Not Applicable	Not Applicable Not Applicable	YES YES		2014 2015	↔ 38 ↔ 38	56 39	530 145	2085 868

S.No	Lab Id	Lab Name	List of Experiments	Client side Dependencies	java	rtxas	jar	jsp	swf	fla	js	py	php	c	m	Source code required or not (Yes/No)	Source #77 (Bitbucket/Container)	Analysis Year	Unique visitors	Number of visits	Pages	Hits	
			Forecast Vibration of Single Degree of Freedom System	Java 3D, Flash,Java and IcedFta plugin	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available								
			Impulse Response of SDOF	Java 3D, Flash,Java and IcedFta plugin	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available								
				Java 3D, Flash,Java and IcedFta plugin	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available								
			Vibration of M.D.O.F System	Java 3D, Flash,Java and IcedFta plugin	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available								
			Behaviour of Rigid Block	Java 3D, Flash,Java and IcedFta plugin	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available								
			Transient Response of Building Continuous Systems	Java 3D, Flash,Java and IcedFta plugin	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available								
			Vibration Control	Java 3D, Flash,Java and IcedFta plugin	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available								
8	CSE16	Speech Signal Processing	Manual speech signal-to-symbol transformation	Java Plugin 1.7.0_79,acelion plugin	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES	Source: java for all the 9 experiments are not available in bitbucket and in container	2014	↔ 812	1038	6318	32286	
			Speech production mechanism	Java Plugin 1.7.0_79,acelion plugin	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES		2015	↔ 784	960	4847	28767	
			Nature of speech signal	Java Plugin 1.7.0_79,acelion plugin	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
			Basics of DSP	Java Plugin 1.7.0_79,acelion plugin	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
			Short time spectrum analysis of speech	Java Plugin 1.7.0_79,acelion plugin	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
			Spectrographic analysis of speech	Java Plugin 1.7.0_79,acelion plugin	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
			Central analysis of speech	Java Plugin 1.7.0_79,acelion plugin	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
			Linear prediction analysis of speech	Java Plugin 1.7.0_79,acelion plugin	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
			Formant synthesis	Java Plugin 1.7.0_79,acelion plugin	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
			Analysis-by-synthesis of speech	Java Plugin 1.7.0_79,acelion plugin	Not available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
9	CSE21	Optical Remote Sensing	EM Spectrum	Flash, Java, Java 3D	Not available	Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable			2014	↔ 28	48	104	860	
			Back-Door Radiation	Flash, Java, Java 3D	Not available	Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable			2015	↔ 170	177	580	4135	
			Reflectance of Natural objects in the Electromagnetic spectrum	Flash, Java, Java 3D	Not available	Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable								
			Sensors and Image Data Characteristics	Flash, Java, Java 3D	Not available	Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable								
			Capturing Area-wide reflectance effect of spatial isolation	Flash, Java, Java 3D	Not available	Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable								
			Data quantization levels and object extraction effects of Radiometric characteristics of the sensor	Flash, Java, Java 3D	Not available	Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable								
			Visual Analysis - Band Combination	Flash, Java, Java 3D	Not available	Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable								
			Band Algebra - Index based Analysis	Flash, Java, Java 3D	Not available	Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable								
10	EEEC02	Soil Mechanics and Foundation Engineering	Water Content Experiment	Java 3D, Flash,Java and IcedFta plugin	Available	Available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable			2014		1011	2010	17780	54970
			Unit Weight Experiment	Java 3D, Flash,Java and IcedFta plugin	Available	Available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable			2015	↔ 1,468	1826	14813	51551	
			Specific Gravity Experiment	Java 3D, Flash,Java and IcedFta plugin	Available	Available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable								
			Grain Size Distribution Experiment	Java 3D, Flash,Java and IcedFta plugin	Not available	Not available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable								
			Atterberg Limits Experiment	Java 3D, Flash,Java and IcedFta plugin	Available	Available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable								
			Permeability Experiment	Java 3D, Flash,Java and IcedFta plugin	Available	Available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable								
			Compression Test Experiment	Java 3D, Flash,Java and IcedFta plugin	Available	Available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable								
			Direct Shear Test Experiment	Java 3D, Flash,Java and IcedFta plugin	Available	Available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable								
			Trialaxial Test Experiment	Java 3D, Flash,Java and IcedFta plugin	Available	Available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable								
			Triaxial Test Experiment	Java 3D, Flash,Java and IcedFta plugin	Available	Available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable								
11	CNSB01	Molecular Fluorescence Spectroscopy	Introduction to the fluorescence spectroscopy principle	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NO	Source: are available for all the experiments in Bit-lab	2014	↔ 185	342	1084	5965	
			Familiarization with the fluorescence instrumentation	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NO		2015	↔ 228	260	656	4116	
			Familiarization with excitation and emission spectra, Mirror Image relation and Stokes Shift	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NO							
			Demonstration of solvent effects on fluorescence spectra	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NO							
			Demonstration of pH effects on fluorescence spectra	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NO							
			Effect of concentration (optical density) of a fluorophore on emission spectra	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NO							
			Relationship between the concentration of a fluorophore and its fluorescence intensity	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NO							
			Determination of unknown concentration of an analyte in solution	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NO							
			Determination of fluorescence quantum yield of a fluorophore	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NO							
			Fluorescence Quenching and Stern-Volmer plot: Estimation of the quenching constant from Stern-Volmer plot	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NO							
			Effects of excimer and exciplex formation on fluorescence emission spectra	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Available	Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NO							
12	CNSB04	Quantum Chemistry	UV-Visible Spectroscopy of Conjugated Molecules	Java and IcedFta plugin	Not available	Available	Not Required	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Required			2014	↔ 289	561	3340	17491	
			Vibromodulation Spectroscopy of Hydrogen Chloride	Java and IcedFta plugin	Not available	Available	Not Required	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Required			2015	↔ 204	271	2197	10237	
			Geometry Optimization using ab-initio quantum calculations	Java and IcedFta plugin	Not available	Available	Not Required	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Required								
			Calculation of Vibrational Frequency of Molecules and Visualization of Normal Modes	Java and IcedFta plugin	Not available	Available	Not Required	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Required								
			Huckel Molecular Orbital Theory	Java and IcedFta plugin	Not available	Available	Not Required	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Required								
			Conformational Analysis of 1,2-dichloroethane	Java and IcedFta plugin	Not available	Available	Not Required	Not Applicable	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Required								
			Transition State Calculation for a SN2 reaction	Java and IcedFta plugin	Not available	Available	Not Required	Not Applicable	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Required								
			Eigen systems: Geometrical Interpretation	Java and IcedFta plugin	Not available	Available	Not Required	Not Applicable	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Required								
			Geometry Optimization of Molecules	Java and IcedFta plugin	Not available	Available	Not Required	Not Applicable	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Required								
13	CNSB05	Circular Dichroism Spectroscopy	1. To determine the specific rotation of a sugar using a polarimeter.	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Not Available	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES	Source: java for 3, 4, 8 experiments & fls for 1, 6, 7 experiments are not available in bitbucket and in container	2014	↔ 116	208	986	4676	
			2. To understand the effect of chiral substances on plane polarized light as a function of wavelength.	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	fls file is available	Available	Available	Available	Not Applicable	Not Applicable	NO		2015	↔ 406	449	1521	11639	
			3. To study the Optical Rotatory Dispersion (ORD) of some chiral substances.	Java and IcedFta plugin	Available	Available	Not Applicable	Not Applicable	Available	Available	Available	Available	Available	Not Applicable	Not Applicable	YES							
			4. To study the Circular Dichroism of some substances with chiral chromophores.	Adobe Flash Plugin	Not Applicable	Available	Available	Not Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
			5. To Study the operational details of a CD spectrometer.	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable	NO							
			6. To Study the effect of Secondary structure elements on CD spectrum of proteins.	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Not Available	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
			7. To deconvolute the CD spectrum of a given protein solution and to determine the content of its secondary structure elements.	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Not Available	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
			8. To study the thermal stability of proteins.	Adobe Flash Plugin	Not available	Available	Available	Not Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
			9. To study the effect of chemical denaturation on protein stability.	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable	NO							
			10. To study the comparison between protein unfolding and protein aggregation in the presence of chemical denaturing agents.	Adobe Flash Plugin	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable	NO							
14	EEEC04	Basic Structural Analysis	1.Single Span Beams Experiment	Java 3D, Flash,Java and IcedFta plugin	Available	Not Available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES	Source: java & fls for all the 10 experiments are not available in bitbucket and in container	2014	↔ 617	1258	8667	30923	
			2.Continuous Beams Experiment	Java 3D, Flash,Java and IcedFta plugin	Available	Not Available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES		2015	↔ 933	1103	8883	30315	
			3.Column Analysis Experiment	Java 3D, Flash,Java and IcedFta plugin	Available	Not Available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
			4. Portal Frames Experiment	Java 3D, Flash,Java and IcedFta plugin	Available	Not Available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
			5. Plates Experiment	Java 3D, Flash,Java and IcedFta plugin	Available	Not Available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
			6. Rigid Joints Experiment	Java 3D, Flash,Java and IcedFta plugin	Available	Not Available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
			7. Arches Experiment	Java 3D, Flash,Java and IcedFta plugin	Available	Not Available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
			8. Trusses Experiment	Java 3D, Flash,Java and IcedFta plugin	Available	Not Available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
			9. Retaining Walls Experiment	Java 3D, Flash,Java and IcedFta plugin	Available	Not Available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
			10. Plastic Hinge Experiment	Java 3D, Flash,Java and IcedFta plugin	Available	Not Available	Available	Available	Available	Available	Available	Not Applicable	Available	Not Applicable	Not Applicable	YES							
15	CSE30	Analog CMOS VLSI Circuit Design	1. Design and characterization of common source amplifier with Resistive load. * Transfer Characteristics (Vin v/s Vout) * Frequency Response (Vin v/s Frequency)	Java and IcedFta plugin	Available	Available	Not Available	Not Available	Not Applicable	Not Applicable	Available	Not Applicable	Available	Not Applicable	Not Applicable	NO	Source: are available.	2014	↔ 997	1371	11736	53025	

[illegible]