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# Bits'n'Byte

DEPARTMENT OF COMPUTER SCIENCE



Parvatibai Chowgule College of Arts and Science  
(Autonomous)

## Workshop on R-Tool



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## Workshop on R-Tool

The Department of Computer Science organized a two day State level workshop on 'R' Programming Tool on 29th and 30th September 2016 in the Upper Auditorium of the College. Mr. Hiren Dand, Director of V.V.M College of IT, Mulund Collge of Commerce & Management and Prof. RajendraPatil, Assistant Professor from S.K. Somaiya College, Mumbai were the Resource Psersons.

Dr. SameenaFalleiro, Associate Professor from the Department of Computer Science of the college was the Convenor of the workshop and Mr. Abhishekh Gudekar, Assistant Professor, from the Department of Computer Science was the Organising Secretary. Ms. Karen Lobo, a student of M.Sc-IT initiated the session on Day One with an opening prayer followed by an introductory address by Mr. Prabhakaran, The Head of the Department of Computer Science. Ms. Sanas Shaikh Assistant Professor, from the Department of Computer Science welcomed the dignitaries, with a bouquet of flowers,

followed by Dr.Sameena Falleiro introducing the resource persons. There were Faculties (03) and Students(04) from various colleges in Goa along with Chowgule College faculty(06) and students(02) (other than Computer Science) who participated actively in the workshop.

The workshop started with the downloading and installing of the R-Tool. Mr. Rajendra began by pointing out the significance of R-Tool in various research fields such as Statistics, History, Geography, and a variety of other Sciences. He also stressed on the scope and application of the program. He encouraged us to contribute to the R-Tool. He described that there are multiple approaches to different problems wherein R-programming comes into the picture and handles them with just a single command. It helps in analyzing and processing data by executing functions to produce approximate solutions. He compared it with an analogy of obtaining football or cricket scores to generate statistical information of the previously played matches of any particular team or player, or of a businessman investing in share markets intending

## This issue

Workshop on R-Tool P.1

Department News P.2

Python Workshop P.4

to know of it's changes and accordingly analyzing and coming up with the best of decisions. He also made us conscious of the fact that Statistics is involved in our day to day life. Statistics is automatically generated all the time by default whether we like it or not. The R-Tool can compute enormous range of basic mathematical functions to the most complex algorithms. Large volumes of data sets can be computed, processed and analyzed. At the same time it is user friendly and even a layman with no prior knowledge in computer programming could pick up its basics. It can calculate basic mathematical operations, trigonometric functions, logarithms, vectors, matrices, lists and arrays. It is also useful to plot graphs based on the statistical inputs with a single command. Mr.Hiren facilitated us to learn to use different variables in 'loops' namely 'for loop' and 'while loop'. Implementing 'functions' in the R-programming script and involving the 'if statements' was also a stress-free task.

Mr. Rajendra resumed the evening session illustrating the installation of R-Tool packages via internet. After the installation of the various packages one could compute and find solutions by comparing his/her data with thousands of researched statistical data. Reading and writing of files with statistical data in '.csv' format and performing operations on that data makes it rather easy to use. R-Tool reduces the workload of any user to a great extent thus saving their time. The 2<sup>nd</sup> day of the workshop commenced by Mr. Rajendra Patil elucidating the various kinds of statistical operations that can be achieved using the R-Tool. For example, finding variates for Poisson distribution, binomial distribution, exponential distribution and so on.

and so on. Applications of these statistical tools in real life aspects were also demonstrated. Also the basic concepts of permutations and combinations were highlighted.

In the second session Mr. Hiren Dand expounded on the topic of validation of statistical rules on statistical data by the use of examples. He also explained the alternative solutions to achieve accurate results using hypothesis.

In the final session of the day, Mr. Rajendra spoke on creating scatter plots using R-Tool followed by his research paper on Assisted Reproductive Technology (ART). Mr. Hiren displayed his research paper on transference of computation of the mobile devices to cloud device.

The workshop has surely inspired young minds to use the abilities of R-tool to the fullest.

Mr.Kevin Fernandes  
& Mr. Arafat Bagalkot  
(M.Sc-IT Part-I)

## Department News

1. Mr. Ian Barreto, Associate Professor, Department of Computer Science, attended a workshop on "Android" at St.Xavier College, Mapusa on 20<sup>th</sup> August, 2016.
2. Ms.Judith Barreto, Assistant Professor, Department of Computer Science, attended a Refresher course in Computer Science at UGC-Human Resource Development Centre, University of Calicut, Mallapuram, Kerala from 10<sup>th</sup> to 30<sup>th</sup> August, 2016.
3. Dr. Sameena Falleiro organised a workshop for T.Y.B.Sc students on "Version Controlling using GIT" on 24<sup>th</sup> August, 2016. Mr.Castor Godinho, FOSS founder and a student from M.Sc-IT was the resource person.







Mr.Mahesh Matha at Government Multi Faculty College

### Training programme for staff members of Dept. of Agriculture, Goa



4. Mr. Mahesh P. Matha, M.Sc. IT Course Coordinator, delivered a lecture on the topic "Object-Oriented Programming using Java", at the Government Multi Faculty College, Dharbandora, Ponda, Goa on 20th September, 2016.
5. Mr. Mahesh P. Matha and Mr. Abhishek Gudekar, Assistant Professors from MSc IT, participated in the awareness programme on "Spoken Tutorial", co-ordinated by IIT-Mumbai, on 12th October 2016, in Saraswat College, Mapusa. The Hon. Vice Chancellor of Goa University, Dr. Varun Sahni delivered the introductory remarks highlighting the importance of the Spoken Tutorial Programme. The resource person for this programme was Ms. Prerana Mhatre from IIT-Mumbai.
6. Mr. Castor Godinho, Mr. Sajid Shaikh, Mr. Rishikesh Kamtekar & Mr. Ameer Nagvenkar, students of M.Sc IT, participated in "Codies" event on 10<sup>th</sup> October 2016, at Computer Department, Goa Engineering College Farmagudi, Ponda Goa.
7. Mr. Castor Godinho & Mr. Wendham Gray, students of M.Sc IT – Part II, attended a two days conference/convention on "Open Source Day" organised by OPENSOURCE FOR YOU in Bangalore at NIMHANS Convention Centre on 21/10/16 and 22/10/16.
8. Mr. Mahesh Matha, Assistant Professor MSc.IT, organised a talk on "IT Careers and Technologies", by Mangirish Salelkar from Umang

- Software, for Students of TYBSc, PGDCA & M.Sc on 6th October, 2016.
9. Mr. D. Prabakaran Head of the department & Mr. Vasant Shirwaikar, Junior Programmer organized an online Mumbai IIT Spoken Tutorial Exam for "C Language". 15 students have answered the exam and 14 of them have passed the exam.
10. Dr. Sameena Falleiro, Associate Professor, was selected by the College to participate in a two week Exchange Programme at Waseda University, Tokyo, Japan from 6<sup>th</sup> November 2016 to 20<sup>th</sup> November 2016.
11. Mr. Castor Godinho & Mr. Wendham Gray, students of M.Sc(IT) – Part II, developed Webpages for the Training Programme of Goa Institute of Public Administration & Rural Development organised by Ms. Anagha Bicholkar, Assistant Professor, Dept. Of Geography along with Dept. Of Computer Science.
12. Mr. Tushar Vaskar, student of M.Sc(IT), designed of CD cover for the Training Programme of Goa Institute of Public Administration & Rural Development organised by Ms. Anagha Bicholkar, Assistant Professor, Dept. Of Geography along with Dept. Of Computer Science.
13. Ms. Shaila Ghanti, Mr. Ian Barreto, Mr. Kumaresh V C & Dr. Sameena Falleiro have participated in one day workshop on "B.Sc.(Computer Science) Semester VI Papers", organised by Department of Computer Science & IT, Dhemphe College on 30th November 2016 from 10am to 5pm.

14. Ms. Anagha Bicholkar, Assistant Professor, Dept. Of Geography and Goa Institute of Public Administration & Rural Development Conducted 3 days training programme for staff members of Dept. of Agriculture, Goa from 2nd November 2016 to 4th November 16 in the Laboratory of Department of Computer Science. Ms. Neeta dhopeswarkar, Assistant Professor was the Coordinator for the training Programme and Mr. Vasant Shirwaikar & Ms. G.V.K. Nagalakshmi were the Resource Persons of the training programme.

### Python 2 workshop at Goa University

The workshop was organised by ACM- W, Oracle Academy and Goa University on 23<sup>rd</sup> September 2016, which was conducted by a personnel from IIT, Mr. Hitesh. The workshop covered an overview, basics and features of Python 2.

The course was targeted for all the women across the field of IT and computer and aimed to make women more aware about the growth of software industries and IT sectors. The main purpose of the workshop was to understand and learn the programming language – Python 2.

The workshop was attended by 4 third year computer science students – Prajyota Yedavi, Rhugveda Desai, Steffi Samuel and Sumya Sayed.

The workshop was conducted in the Department of Computer Science (Block-C) at Goa University. The workshop began at 9 a.m. with an introduction and language basics. Later a brief background about Python was discussed. From 10.30 a.m. to 10.40 a.m. a refreshment break was provided. From 10.40 a.m. to 01.00 p.m. the focus was on the various expressions, values, data types and functions which are used in Python2. At 01.00 p.m. there was a 45 min lunch break. Then from 01.45 p.m. to 04.00 p.m. the session continued and we were taught about classes, files, directories and packages used in Python2. There was a 15min break provided at 04.00 p.m. The session concluded with building a game of Tic-Tac-Toe in Python2. The workshop was ended by 06.00 p.m.

Overall it was a very informative and interactive workshop. We could learn the basics as well as a few advanced features of Python2. A certificate from ACM-W will be sent by post to everyone who attended this workshop.

Ms. Prajyota Yedavi  
Ms. Rhugveda Desai  
Ms. Steffi Samuel  
Ms. Sumya Sayed  
TYB.S.c

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