

### **Our Vision**

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To be a centre of excellence for girls in Information Technology by preparing them to be efficient problem solvers, innovators and entrepreneurs in the era of dynamic IT field as well as to empower women by providing roadmaps that foster professionalism, humanism and social responsibility.

### **Our Mission**

- To provide excellent field related technical knowledge and skills.
- To foster interpersonal and leadership skills through co-curricular and extracurricular activities and thus develop a thirst for lifelong learning among students.
- To create a vibrant and an intellectually stimulating environment for students to empower them for real world problem solving.

### Message from HOD



Dear Readers,

First, I hope and pray that you may lead a great success in your personal as well as professional life respectively. May God bless you all. It's my pleasure to present the fifth volume of the newsletter. During this report period, the department was active with some of its major activities. Due to COVID-19 pandemic circumstances, we had adopted online education methods to continue teaching-learning process. We welcome our first year students and wish them best of luck for their academic journey.

Further, in view of the ongoing "COVID-19" pandemic across the globe, I personally appeal you all to stay at home and stay safe during this period. I wish you all to be strong, stay positive, and strictly follow all the government restrictions and health guidelines at this time. The IT department will remain focused on providing its excellent teaching & support to our academic community.

### **DEPARTMENT ACTIVITES**

The IT department regularly conducts seminars to enhance students' knowledge and skills. Due to COVID-19 pandemic, we organized the following three webinars and finishing schools. Second year and final year students took advantage of it.

Sr. No	Name of Webinar	Date	
1	DJANGO	24-06-2020	
2	РНР	17-10-2020	
3	Finishing School by SCOPE	19-11-2020 to 24-11-2020	
4	Finishing School Cyber security & threats" Technical finishing	04-12-2020 to 9-12-2020	



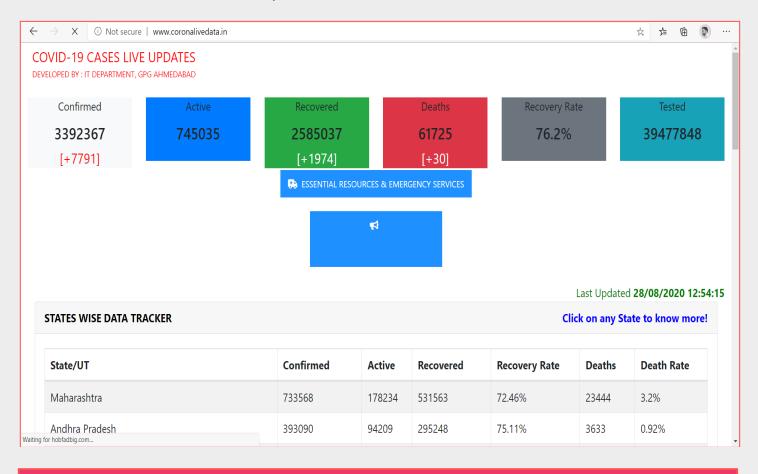


We proud to announce that our final year student Ms. Muskan Rawat, has implemented real time corona virus cases data tracker website under guidance of Ms. Hemali H. Vithalani.

#### Website URL: www.coronalivedata.in

### **KEY FEATURES:**

- Overall total number of Cases, Active Cases, Recovered and Deaths count
- Daily Increase in cases tracking
- Total number of Samples tested so far
- State wise count and daily increase data
- District data of all states and daily updates
- Essentials, Help lines and Safety measures
- Location based alert system (in progress)
- Website Live & 100% Mobile Friendly



### **Our Top Rankers in Institute and University**

Sr. No	Enrolment No	Name	Semester	Rank
1	196140316091	PATEL HONEY MANILAL	2	1 <sup>st</sup> rank in institute
2	196140316108	PITHADIYA KHUSHI VIPULBHAI	2	4 <sup>th</sup> rank in institute
3	196140316006	BHATT ASTHA ARPIT	2	5 <sup>th</sup> rank in institute
4	196140316079	PATEL AISH DINESHBHAI	2	6 <sup>th</sup> rank in institute
5	196140316052	MAVADHIYA PUJABEN DILIPKUMAR	2	7 <sup>th</sup> rank in institute
6	186140316027	GUPTA JANVI SANJAYKUMAR	4	7 <sup>th</sup> rank in institute

7	176140316094	RAWAT MUSKAN PRAMOD	6	3 <sup>rd</sup> rank in GTU
8	176140316088	RAKHOLIYA ARMIKABEN DINESHBHAI	6	4 <sup>th</sup> rank in institute
9	176140316115	THAKKAR TULSI MAYURBHAI	6	5 <sup>th</sup> rank in institute
10	176140316048	MISTRY NISHTHA PRAKASHBHAI	6	8 <sup>th</sup> rank in institute
11	176140316122	VATSRAJ AAKRUTI HIREN	6	9 <sup>th</sup> rank in institute
12	176140316010	CHAMPAVAT NAMRATA YASHPALSINH	6	3 <sup>rd</sup> rank in institute
13	176140316002	BAGUL SHIVANI PRAKASHBHAI	6	4 <sup>th</sup> rank in institute

### **Thought Box**

### The road

The road, made up of cement, concrete, asphalt, sand and crushed rock takes a real long time to construct. Asks a lot of struggle from the people living nearby. People can use no transportation for some days, months or maybe years. The struggle is long, the days are hard but only till the work is done. As soon as the work is finished, the struggle is gone and everyday feels like a new day. The road now helps you to travel from your house to friend's house, your house to relative's house and so much more. THE ROAD HELPS YOU TO CONNECT TO THE PEOPLE YOU LOVE, RESPECT THE ROAD. DON'T LITTER YOUR STRUGGLE...!

Written by Namrata Goswami(6th sem)

### **Technical Corner**

# **<u>4 Steps to learn any new programming language</u>**

Programming is a critical skill that can seem complex for some people. The skill has become crucial in today's age. Once you learn how to logically solve any problem, learning a programming language is much easier for you. Here are 4 steps to learn any new programming language.

#### 1. Syntax

Any programming language is all about the structure of the code. Syntax encompasses both how the code is written as well as the actual words used to construct statements. Python uses indentation to indicate where the block ends and starts. Lua uses the keyword 'end'. Java and C++ use braces.

#### 2. Conditions

Any new programming language has a finite number of words that it recognises as valid. Using additional libraries, you can expand the vocabulary. Even in a low-level language like C, there are only 32 words. Knowing these keywords can help you master any programming language. If you want to write a program that allows you to click and drag an icon, your code has to detect when the mouse cursor is positioned over an icon. Python uses a combination of if, else...if, and else.

#### 3. Data types

The programming language is all about data. You have to master how a language recognises different kinds of data. All languages understand integers. Most of these integers are decimals and individual characters. Some languages even have extra data types built in.

#### 4. Operators and parsers

Once you understand what type of data the language deals in, you can learn how to analyse it. There are notable exceptions in languages like Lisp and Bash. You also need to learn how to compare and operate on non-numerical data such as characters and strings.

#### Article by Faculty M L Dave

### What is cloud computing?

Cloud computing is on-demand access, via the internet, to computing resources—applications, servers (physical servers and virtual servers), data storage, development tools, networking capabilities, and more—hosted at a remote data center managed by a cloud services provider (or CSP). The CSP makes these resources available for a monthly subscription fee or bills them according to usage.

Compared to traditional on-premises IT, and depending on the cloud services you select, cloud computing helps do the following:

Lower IT costs: Cloud lets you offload some or most of the costs and effort of purchasing, installing, configuring, and managing your own on-premises infrastructure.

**Improve agility and time-to-value:** With cloud, your organization can start using enterprise applications in minutes, instead of waiting weeks or months for IT to respond to a request, purchase and configure supporting hardware, and install software. Cloud also lets you empower certain users—specifically developers and data scientists—to help themselves to software and support infrastructure.

**Scale more easily and cost-effectively:** Cloud provides elasticity—instead of purchasing excess capacity that sits unused during slow periods, you can scale capacity up and down in response to spikes and dips in traffic. You can also take advantage of your cloud provider's global network to spread your applications closer to users around the world.

The term 'cloud computing' also refers to the technology that makes cloud work. This includes some form of virtualized IT infrastructure—servers, operating system software, networking, and other infrastructure that's abstracted, using special software, so that it can be pooled and divided irrespective of physical hardware boundaries. For example, a single hardware server can be divided into multiple virtual servers.

Virtualization enables cloud providers to make maximum use of their data center resources. Not surprisingly, many corporations have adopted the cloud delivery model for their on-premises infrastructure so they can realize maximum utilization and cost savings vs. traditional IT infrastructure and offer the same self-service and agility to their end-users.

If you use a computer or mobile device at home or at work, you almost certainly use some form of cloud computing every day, whether it's a cloud application like Google Gmail or Salesforce, streaming media like Netflix, or cloud file storage like Dropbox. According to a recent survey, 92% of organizations use cloud today (link resides outside IBM), and most of them plan to use it more within the next year.

#### -By BHATT ASTHA ARPIT(3<sup>rd</sup> Sem)

### **Festival Celebration by Student**



Clay Art by Neha Singh(5<sup>th</sup> Sem)



Drawing by Hirva Rao(5th Sem)

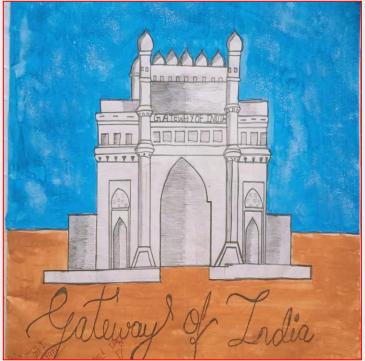
**Thought Box** 

#### Regret. Reverence. Redemption.

The 3 R's to make you whole. Once you've done something horrible, you must act to save your soul. When you truly regret the act, that's the first step. Follow it up with reverence, the past is a place you must respect. It formed you. It changed you. It made you who you are. And once you accept the person in the mirror, that's where redemption starts.

Written By Sherya (1st Sem)

## Students' Creativity



Drawing by Maithili Mehta(1st Sem)



Drawing by Trivedi Diya(1st Sem)



Doodle Art by Yukta Panchal(1st Sem)

Drawing by Rutvi Patel(1st Sem)



Wall painting by Diksha Patel (1st Sem)



Painting by Khusi Patel (1st Sem)

# **Just Think**

હેડફોનમાં બે માઈક્રો-સ્પિકર્સ હોય છે.

જેમાં સાઉન્ડ માટે નોઇઝ-ફિલ્ટર, બઝ-ફિલ્ટર, સ્ટીરિયો-મોનો ફિલ્ટર ઇફેક્ટ્સને સંતુલિત કરવાની સુવિધા પણ હોય છે.

જેથી 'અંદરથી' આવતો અવાજ સ્પષ્ઠ સંભળાય. બશર્ત બંને સ્પિકર્સને કાનમાં બરોબર ફિટ ગોઠવ્યા હોય તો.

પણ કોઈક કારણસર ફક્ત એક જ કાનમાં સ્પિકર ભરાવ્યું હોય અથવા (કોઈક ટેક્નિકલ કારણોસર) એક જ સ્પિકરમાં અવાજ સંભળાતો હોય ત્યારે સાંભળવાની અસલી મઝા અડધી થઇ જાય છે. સમજોને કે સ્ટીરિયોમાંથી મોનો-સાઉન્ડ બની જાય છે.

ત્યારે 'માત્ર સાંભળવું' અને 'ધ્યાન દઈ સાંભળવું'નો ફર્ક પણ સ્પષ્ઠ થાય છે.

એટલે જ એક કાનથી માત્ર HEARING થાય છે. પણ બંને કાનથી LISTENING થાય છે.