

Hey there!

Welcome to my second post in the category '*My College Diaries*'.

In case you don't know what I am talking about; It's a series of blogs in which I describe my day at my college 'Acharya Naredra Dev College-DU'.

I had to get up early today as there was a Run for Unity Marathon in the College today. It was organized to celebrate the birthday of our freedom fighter: Sardar Vallabh Bhai Patel. Prepared my Break Fast and in a hurry ad started revising my notes for my French Test. (Quick Note: I am a Physics Major but am also learning French as an add-on course.) The Marathon started at 9 am and it was really fun. I had a great time with my friends. Here are some of the pictures that I took with my friends.



My batchmates and I posing for a Group Photo on Run For Unity Event at ANDC



After the Marathon it was time for my 'Optics class', which I decided to skip, and it turned out to be a really bad idea in the end, as my professor, Dr. Ranjeet Singh, chose today to teach us the *Fresnel and Kirchoffs Integral Theorem*'. Well what's done is done. Besides I was really tired after the hectic week and also utilized the time to prepare for the test that was scheduled later on.

At 12.25 pm, I had my Digital systems Lab. This Lab is my favourite as I really like computers ad Digital electroics and it comes easy to me, so I don't have to give it any special effort. Anyhow, this semester we had to do 8 experiments from a list of 12 and I had already completed 9 of them by last week. We built circuits like – Adder circuits(2,3,4 bits) Subtractor Circuits(2,3,4 bits), Flip-Flops(SR, JK, D), and all other cool stuff. Here are some of the experiments that I recorded. Please ignore some minor mistakes.

<https://www.youtube.com/watch?v=Hnc3LKmt7w>

https://www.youtube.com/watch?v=wr_GJnHJUfA

<https://www.youtube.com/watch?v=U-eybqeUgqY>

Well, today I decided to make a 'Shift Register', in which we can input ad access data serially/parallel. I decided that to use the D-flip flops. The IC I used was 7474/74LS74. It has a pin for D(input) and active low 'Clear and Presets'. The IC has two D-FFs in all. So I needed just two ICs two create a 4-bit register. For those who have no idea what I

College Diaries: 31st October 2014 – Run for Unity – Shift Register – French Test | 2
just said: Basically I was building a 4-bit memory. So if you entered a no. between 0-16, it could store it.

But sadly, I couldn't make it work. Though there was nothing wrong with the circuit diagram, I couldn't figure out the mistake. The problem was that the whole set of the flip-flops which should have been working as a 'Shift Register', was still working as a simple D-type FF. LOL! I must be the only person in the world to create a D-FF with 4 D-Flip Flops.(HAHA at me).

After that I was all set for my French Test finally. It was a piece of cake. I managed to finish it in no time.

Well that's all for today.
See you in the next blog.

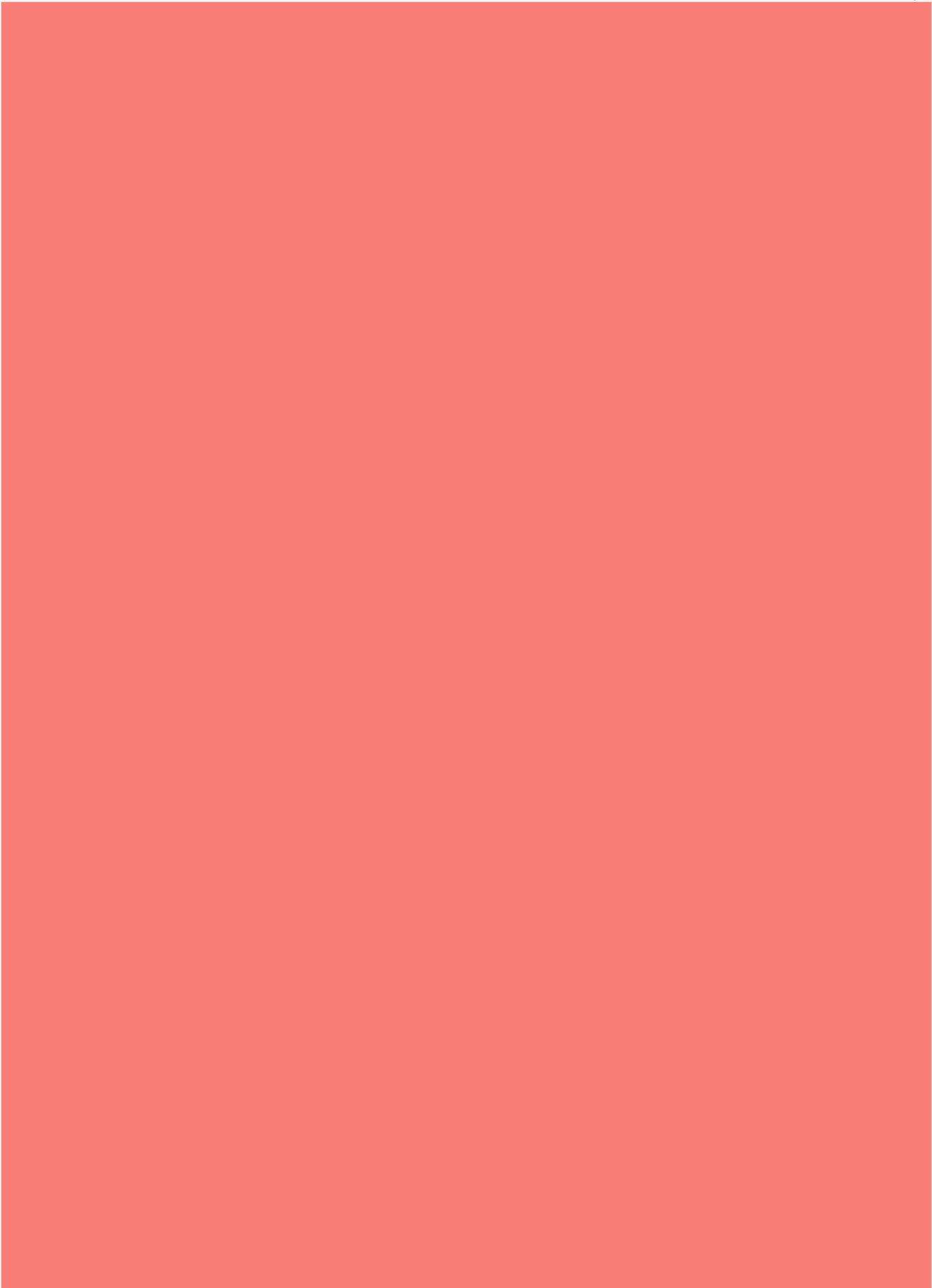
Tchao!



Manas Sharma

I'm a physicist specializing in computational material science with a PhD in Physics from Friedrich-Schiller University Jena, Germany. I write efficient codes for simulating light-matter interactions at atomic scales. I like to develop Physics, DFT, and Machine Learning related apps and software from time to time. Can code in most of the popular languages. I like to share my knowledge in Physics and applications using this Blog and a YouTube channel.

manas.bragitoff.com/





Share this:

[Click to share on Facebook \(Opens in new window\)](#)

[Click to share on Twitter \(Opens in new window\)](#)

[Click to share on WhatsApp \(Opens in new window\)](#)

[Click to share on Pinterest \(Opens in new window\)](#)

[Click to share on Reddit \(Opens in new window\)](#)

[Click to share on LinkedIn \(Opens in new window\)](#)

[Click to email a link to a friend \(Opens in new window\)](#)

[Click to print \(Opens in new window\)](#)

[Click to share on Tumblr \(Opens in new window\)](#)

[Click to share on Pocket \(Opens in new window\)](#)

[Click to share on Telegram \(Opens in new window\)](#)

[wpdon id="7041" align="center"]