*Explaining what is machine learning to my grandma.*

My grandma was always curious about what I study staring at the screen most of the time and would interrogate if I was really studying or making excuses to run from the chores. So took this opportunity to really enlighten what I do studying mean being in an IT environment.

Went up to her saying today I’ll be telling you stories about my times. You remember grandma you always told me how we human learn from our past mistakes? So is it also possible with the machines? She gazed at me almost giving up on what I was talking which made no sense to her, so clearing up the dust I told her that this is the difference between us and the machines that we learn from our past mistakes or we realize our mistakes but machines don’t because they are non-living things.

Now how do machines understand what we are trying to say or why are they only limited with specific functionalities? Because machines can only understand the language of 0 and 1, this is called as binary language. So now if we want the machines to perform a task, we provide them with all the step by step details like if you ask me to buy milk you’ll give me all the instructions like check the expiry date, tell me where to go, how much quantity to buy etc.

So same is with the machines and computers they have to be programmed to act in a specific manner to follow the instructions given by us. So this is where machine learning comes in the picture, Machine learning is machine’s learning from the experiences of past data. **It focuses on the development of computer programs** that can access data and use it to learn for themselves. To be expressed in short words the ability of machine to learn on their own from the past data without giving them step by step instructions. Machine learning is mainly divided into 3

1. Supervised learning
2. Unsupervised learning
3. Reinforcement learning

Let’s take the same example from above, so this time if you would ask me to buy milk you would not tell me where to go or check the expiry date because it was already told to me and I will follow those instructions and all this falls under Artificial Intelligence. She sighted at me saying so you mean you’ll send a machine to get us grocery? You’ll always be finding ways to dodge the chores!