A loud crash in your kitchen wakes you from a deep sleep. You go to the kitchen to find an alien rummaging through your cabinets. It appears to be very hungry. Explain to the alien how to make a peanut butter and jelly sandwich.

Rousing from my slumber, I groggily approach the alien. Using fanciful hand gestures and contortionist-like body movements, I slowly but surely guide them towards the kitchen counter. We share a meaningful glance. Our intentions are clear. We. Are. Hungry. As this lucky alien’s earthling ambassador, I rub my hands together and reach longingly for the peanut butter and jelly. The alien grumbles in approval. My tummy also grumbles in approval. Collecting all the necessary ingredients and utensils to make a peanut butter and jelly sandwich and placing them on the counter top in front of the alien, we both take in the view. Smooth, silky peanut butter; glittering globs of grape jelly; fluffy, white wonder bread; two shimmering metal knives (one for jelly and one for the peanut butter of course); a white ceramic plate still warm from the dishwasher. As any professional PB&J maker knows, the most vital tool however is a napkin. Don’t want mom to find sticky fingerprints all over the countertops in the morning!

I take a deep breath and channel my inner Gordon Ramsey (if I’m to be the gate-keeper of this age-old family recipe, I have to show my new alien best friend how to assemble the best PB&J ever made). I place the plate in front of us and grab the loaf of bread. I place two slices on the plate side-by-side. I make eye contact to make sure the alien understands that the next steps are most important. He nods his head in comprehension and I continue. I slowly reach out and open the bottle of grape jelly and use my right hand to mimic using a knife to scoop out a bit of jelly while holding the bottle with my left hand. I put down the bottle and grab the slice of bread on the left side of the plate (still holding the pretend knife with jelly mind you). I then show the alien how to spread the jelly on the slice of bread. I stick the pretend knife back in the jelly bottle and set down the slice of bread in its original position. I take one of the actual knives and place it in the jelly bottle and hand it to the alien. I point to the slice of bread I just picked up and wait hopefully for the alien to mimic my actions. (I’d like to point out here that he absolutely does). I’m so proud, I unthinkingly reach out to give the alien a fist bump and to my astonished delight he returns it! Looks like they fist bumps are ubiquitous amongst every culture. Go figure.

Back to the topic on hand. At this point I would replicate the same steps above but with the slice of bread on the right side of the plate, the peanut butter, and the remaining clean knife. I give the alien a nod of approval and he grins goofily, exposing the whitest teeth I’ve ever seen. I motion lifting the slice of bread with the jelly on it and putting it on top of the slice with peanut butter on it. The slices must be placed exactly on top of one another otherwise the peanut butter and jelly will get everywhere and the distributions of both the spreads will be off with every bite. And we wouldn’t want that would we? To make my point extremely clear, I take two fresh slices of bread from the loaf and place one on each of my palms and demonstrate using my left palm to place the slice of bread with jelly on top of the slice of bread with peanut butter on it. Then I point to the plate and nudge it closer to the alien. I don’t have high hopes remembering the first PB&J sandwich I made and getting peanut butter and jelly everywhere because I wasn’t able to place both slices of bread exactly on top of one another. I hold my breath. The alien grabs the jelly slice and places it precisely on top of the peanut butter slice. I shouldn’t be surprised. Not really. I feel like a proud teacher and exclaim “I’m so proud! I knew you could do it!”. As he’s eating however (as one does after making the best meal our race could have concocted) he gets peanut butter and jelly everywhere. I hand the alien the napkin and he laughs sheepishly. He doesn’t know what to do with it. I mimic liking my fingers and wiping them on the napkin. He does the same. By the end of this unforgettable night, I’m launched into a food coma and head back up to bed, hoping against all hope that the alien wasn’t a figment of my imagination, that I’ll wake up tomorrow and see the alien in the kitchen tomorrow night trying to make spaghetti.

\*Side Note: If at any point of time the alien was struggling with my instructions, I would have gone through the motions of making my own PB&J and having him follow along by making his sandwich at the same time I was making mine. If his sandwich didn’t turn out well I would have pointed out where he went wrong and helped him make another one.

Algorithm:

1. Gather all necessary ingredients and utensils and set them on the counter
   1. Ingredients/utensils include:
      1. Bottle of peanut butter
      2. Bottle of jelly
      3. Knife for spreading jelly
      4. Knife for spreading peanut butter
      5. Loaf of bread
      6. Plate
      7. Napkin
2. Grab the plate and set it in front of you
3. Take two slices of bread and place them side by side on the plate
4. Use one of the knives to spread the jelly on the leftmost slice of bread
5. Use the other knife to spread the peanut butter on the rightmost slice of bread
6. Take the slice of bread with jelly on it and place it directly over the slice of bread with the peanut butter on it (make sure the sides of the slices of bread with the spreads on them are put together so that they make up the inside of the sandwich).
7. Use a napkin to clean up any messes/clean off hands.

\*\*Note: If the alien speaks english that I would narrate my actions while also using hand gestures.

ITS Acronym

Choose an Information Technology related acronym and explain its meaning as if you were talking to a non-technical person.

Let's talk about what an OS (operating system) is.

It's a Tuesday afternoon and you turn on your computer to get started on that history paper you've been putting off. You open that Word document with all your notes in it, open the PDF with the assignment instructions, then use your internet browser to start typing up your paper on Google Docs. But have you ever thought about how your computer is able to process and complete the tasks you're asking of it (such as opening Microsoft Word)?

Your OS or operating system is a vital part in this process. It is the translator that is able to understand the language of the computer and our own human language or commands we give to the computer. Think of the OS as a middleman or person translating and interpreting the languages on both sides.

The computer runs on binary code (made up of 0s and 1s), essentially a language we don't understand. Computers don't understand our human language either. To overcome this problem we use an OS. It translates the language humans understand to machine language (computer language) and vice versa. It makes it possible for the computer's software to interact with its hardware. It's why when you press the 'H' key on your keyboard, the letter appears on your Google Docs while writing your essay.

If you're still a little confused. Here's another way of looking at an operating system. The OS is like the soul of your computer. It is the reason why your computer looks the way it does when you boot it up. That's why the screen of your MAC looks different from the screen of your friend's PC. Just as humans need a soul to be alive, so does a computer. It gives the computer its personality. It's like the foundation on which a house is built and furnished. The OS makes up the building blocks for your computer, essentially the foundation of your house.