1. **Choose an object from your environment (e.g., a cup, laptop, car, t-shirt, etc.) and try to test it. Explain why you chose a particular test.**

**Object: Glass Cup**

* **Testing for Cracks:** Inspect the glass cup in search for cracks in the glass. Fill the the glass with water and if the water leaves the cup, it means that the test failed because the purpose of the glass (containing water) is not met.
* **Testing for stability:** Place the glass cup in a flat surface and if falls down to the side it means that it won’t be able to keep the liquid inside of it, and it means that the test failed because that purpose of the glass (containing water) is not met.
* **Testing for Durability:** Let the cup fall from a small height (15 cm) and if the glass cup breaks it means that test failed because the glass is not meant to break from a 15 cm height.
* **Testing for Temparature:** Fill in the glass cup with hot and cold liquids to test the ability to resit different temperatures. If the glass breaks and the water leaves the cup, it means that the test failed because the purpose of the glass (containing water) is not met.
* **Microwave and Dishwasher Test:** Put the glass cup in a microwave and in a dishawaer and if the glass cup breaks it means that the test failed because the cup should be able to endure both these two conditions without breaking.

**2. Explain the definition of validation and verification in your own words.**

In software testing, verification is the process of checking if a specific product is built according to the requirements or not. So, is the the product being built correctly and aligned with its requirements? In other words, it ensures that the software is correctly implemented according to the specific function it was designed to do.

Validation, is the process of checking if a software product is being built according to needs and expectations of our end user, and is up to user standard. The goal here is actual validation the product itself and answering the question of “are we building the right product?”.

**3. Make a comparative table of different types of companies. Indicate the pros and cons of each of them (from the employee's point of view).**

| **№** | **Type of company** | **Pros** | **Cons** |
| --- | --- | --- | --- |
| **1** | **Product** | 1) Close proximity to the team in general (stakeholders, product owner) that allows the QA to easily discuss anything related to the product;  2) Access to customer feedback;  3) Stable work environment and predictable income; | 1) Rigid work hours and less flexibility;  2) Difficult to innovate and gain experience in different tools and processes, since companies often have an already established work process; |
| **2** | **Startup** | 1) Good for first time job and to gain some practicable experience;  2) Easier to make a significant impact and higher chance for career growth; | 1) Since these are not established companies, there is a level of uncertainty associated with the startups;  2) Startups don’t have a lot of money and so there are limited resources, less pay and long work hours involved; |
| **3** | **Outsourcing** | 1) Exposure to different projects and different industries, which allows QA’s to increease their job expertise; | 1) High pressure related to client deadlines;  2) QA external teams have less know-how of the product and less contact with stakeholders, product owners,etc.; |
| **4** | **Outstaffing** | 1) Exposure to different projects and different industries, wich allows employees to increease their job expertise;  2) Flexibility to choose the projects to work on; | 1) Work/Income can be inconsistent;  2) Less benefits associated (health insurance); |
| **5** | **Academy** | * 1) LMS system that allows QA’s to learn best practices without the restrictions of product and industry processes; | 1) Not being being able to apply your learnings directly into a product or have some practical work experience;  2) Lower/No income; |
| **6** | **Recruitment Agency** | 1) Get allocated to projects that match the QA strengths and skill sets; | 1) QA has the pressure to match the skill set the project requires;  2) Project based income; |

**4. Give examples of unsuccessful product validation or verification that you have encountered in your life.**

* **Failed Validation:** Bank App for my credit card has a section with advertising banners that are showing promotional campaigns. However, the banner is not clickable to the users, so we can’t get any more information on that specific campaign. To me, that a failed validation test because as user I expect the banner to be a way to access more information around that specific campaign.
* I don’t have any specific failed verification examples. However, to me a potential use-case could be the example above: suppose the initial requirement was for the banner to be clickable and show more information regarding the campaign, but the developers don’t build the banner as a clickable.