# Task 2

Define a basic set of requirements for the given product.

Describe (intuitively) how would you plan the testing process, define the features to be tested. Write a high-level testing procedure. Describe 2 or 3 possible defects.

# Template:

**Product Name:**

Pencil

**Requirements:**

The product should …

#### 1. UI:

1.1. The pencil should be 19 cm long and 0.7 cm in diameter.  
1.2. The pencil should have a matte black body.  
1.3. The eraser on top should be white and attached with a metallic silver ring.  
1.4. The body should feature the brand name in Arial font, size 10, in silver color.  
1.5. The pencil tip should be sharpened to a standard fine point.  
1.6. The body should be made of wood with a smooth finish.  
1.7. The product should include a hexagonal shape to prevent rolling.  
1.8. The pencil's lead should be soft graphite, suitable for writing and drawing.

#### 2. Functional:

2.1. The pencil should be able to write smoothly on paper without breaking the lead.  
2.2. The eraser should cleanly erase pencil marks without smudging.  
2.3. The pencil should be easily sharpened using a standard sharpener.

#### 3. Usability:

3.1. The pencil should provide a comfortable grip for writing or drawing for long periods.  
3.2. The lead should not break with moderate pressure during normal use.  
3.3. The pencil should not roll off flat surfaces due to its hexagonal shape.  
3.4. The eraser should not leave marks on the paper after use.

**Features to be tested (by priority):**

Functional test (tests 1-3), Usability (tests 4-6), UI (tests 7-10)

**Test procedure:**

1. Write with the pencil on a sheet of paper for 10 minutes.
2. Try to erase a written word using the eraser.
3. Sharpen the pencil using a standard sharpener and measure the remaining length.
4. Apply moderate pressure while writing to check if the lead breaks.
5. Hold the pencil for 20 minutes and evaluate the grip comfort.
6. Place the pencil on a flat surface to ensure it doesn’t roll.
7. Measure the length and diameter of the pencil.
8. Check the body for the correct color and font.
9. Test the durability of the eraser by rubbing out marks 10 times.
10. Try writing on different paper surfaces (smooth, textured, etc.) to evaluate lead performance.

**Defects found:**

**Defect 1:**  
**Issue:** The pencil lead breaks easily under light pressure.  
**Steps:**

1. Write a short sentence applying light pressure.  
   **Expected result:** The lead should remain intact.  
   **Actual result:** The lead breaks during writing.

**Defect 2:**  
**Issue:** The eraser leaves smudges on the paper.  
**Steps:**

1. Write a word and attempt to erase it.  
   **Expected result:** The eraser should cleanly erase the marks.  
   **Actual result:** The eraser leaves smudges on the paper.

Products list

1. Glass
2. Travel mug
3. Table lamp
4. Pencil
5. Book
6. Clock
7. Kitchen knife
8. Office table
9. Sneakers
10. TV remote control
11. Electric kettle
12. Chair
13. Door
14. Fridge
15. Toaster
16. Сoffee maker
17. Baby stroller
18. Umbrella
19. Sunglasses
20. Ottoman bed