**The list of attributes we need as a source**

1. Steels [ХГС, ХВГ, У8...]
2. Quenching environments and their freezing velocities [Water: 600, Oil: 400, Latex: 700]
3. Critical velocities of steels(C/sec) [ХГС: 300, ХВГ: 300, У8: 500]
4. Martensitic transformation start temperature [ХГС: 210, ХВГ: 210, У8: 300]
5. Hardness of steels after quenching from their temperatures [ХГС: 65, ХВГ: 62, У8: 60]

**We need to prove that with Latex environment’s velocity is acceptable.   
  
If the quenching velocity of environment is higher than critical velocity of the steel we will get martensitic microstructure.  
As an input we give steel mark and the hardness we want to get after quenching process.**

**As an output we want to get the environment and temperature where the quenching process has been executed to get the required hardness.**

**EXAMPLE:**

Precondition: Run the code:  
  
Step 1: User gets console message: “Ներմուծեք պողպատի մակնիշը”

Step 2: User gets console message: “Ներմուծեք վերջնական կարծրությունը ըստ ռոկվելի”

Step 3: Check if we have the entered steel mark in our list

If condition is false user gets a message: “Անհնար է իրականցնել քանի որ տվյալները դեռ բացակայում են”

Else {

Step 4: Check the critical velocity of the current steel

Step 5: Check which environment velocity is higher

Step 6: Calculate in how many seconds the selected environment needs to reach the particular steel martensitic transformation’s temperature.

Step 7: Generate text file with steel-mark, the environment, the amount of seconds of reaching the martensitic transformation point (The calculated time on step 6), the expected hardness, the actual hardness.

}