**Specification:**

**Problem:** Calculate the square root

**Input:**

* Square root number **(P, P > 0),**
* **side1**, **side2 –** sides of “square”
* **x –** auxiliary variable (**side1 – side2)**
* **epsilon –** auxiliary variable, storing data about precision of calculation **(epsilon = 0,001)**

**Output:** Square root result (**result)**

**Pseudocode:**

**Start**

**Read P**

side1 := P/2

side2 := P/side1

x := side1 – side2

**if** x > epsilon **then**

**Repeat**

side1 := (side1 + P / side1) / 2;

side2 := P / side1;

x := side1 – side2

**if** x < 0 **then**

x = -x

**Until** x > epsilon

**Otherwise**

Result := side1

**Write** result

**Stop**