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