**ASSIGNMENT 5.3**

**Problem Statement:**

● Find square root of number using Babylonian method.

1. Start with an arbitrary positive start value x (the closer to the root, the better).

2. Initialize y = 1.

3. Do following until desired approximation is achieved.

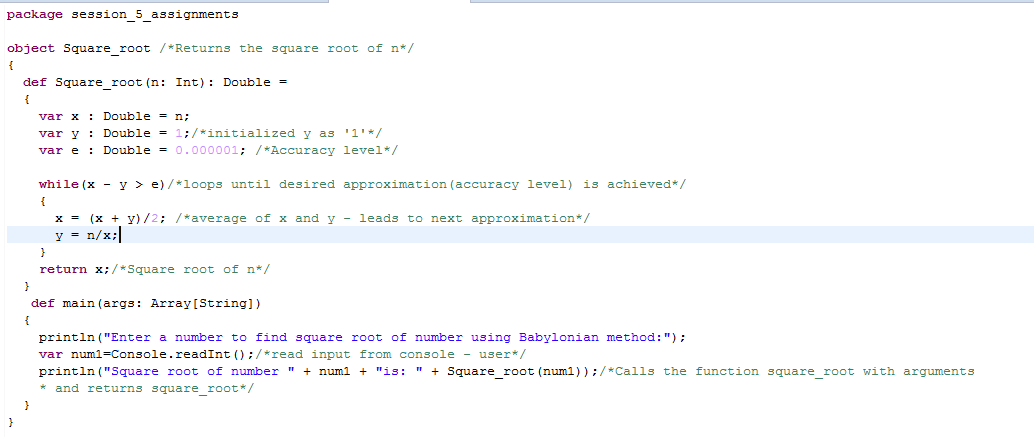
a) Get the next approximation for root using average of x and y

b) Set y = n/x

**Scala code:**

Below code displays square root with Babylonian method.

* Program will prompt for the input
* Reads number from console and calls function Square\_root()
* Initialize y and accuracy level
* Find average of x and y until desired approximation is achieved
* Return the square root



**Result:**

Program prompted for number – 4 and displayed square root – 2.0(Babylonian method)

