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

Code

scala> def squreRoot( n: Float):Float = {

|    var x:Float = n

|    var y:Float = 1

|    var e:Double = 0.000001

|    while ( x - y > e){

|    x = (x+y)/2

|    y = n/x

|    }

|    x

|    }

squreRoot: (n: Float)Float

scala> squreRoot(5)

res1: Float = 2.236068

scala> squreRoot(9)

res2: Float = 3.0

scala> squreRoot(125)

res3: Float = 11.18034

scala> squreRoot(144)

res4: Float = 12.0

scala>

