//

// main.swift

// Assignment3-B

//

// Created by Sandhya Goswami on 10/12/20.

//

**import** Foundation

//print("Hello, World!")

**protocol** Authentication {

**func** isLoginSuccessful()

}

**class** User: Authentication {

**func** isLoginSuccessful() {

print("Authenticated")

}

}

**extension** Int {

**func** repeats(){

**for** index **in** 1...**self** {

print("Loading..")

}

}

}

**let** value = 6

value.repeats()

//Create a class “Flight” with variables “from” and “to”

//Now, create an extension to “Flight” that has two functions “changeFrom” and //“changeTo” and implement them.

**class** flight{

**var** from :String = ""

**var** to: String = ""

}

**extension** flight{

**func** changeTo(){

print("this is to value : \(**self**.to)")

}

**func** changeFrom(){

print("this is from value : \(**self**.from)")

}

}

**protocol** Area {

**func** areaOfSphere(radius: Int)->Double

}

**class** Sphere:Area{

**func** areaOfSphere(radius:Int)->Double {

**return** Double(Double(4) \* 3.14 \* Double(radius\*radius));

}

//Define values to find the areaOfSphere() by adopting the protocol

}

**extension** Sphere {

//Complete the following function to get the value of radius for sphere

**func** getRadius(Area:Double)->Double{

**let** result = Area/(4\*3.14)

//let rd = result.squareRoot()

**return** result.squareRoot()

}

}

**var** Instance1 = Sphere()

print("Area is \(Instance1.areaOfSphere(radius: 4))")

print("Radius is \(Instance1.getRadius(Area: 314))")