**//Teperature ImageApp**

**if**(Int(textInput.text!)! < (-10) && (Int(textInput.text!))! > (-20)){

labelOutput.text! = "Snow day"

imageOL.image = UIImage(named: "Snow")

}

**else** **if**(Int(textInput.text!)! > (10) && (Int(textInput.text!))! < (20)){

labelOutput.text! = "Its cold"

imageOL.image = UIImage(named: "freezing")

}

**else**{

labelOutput.text! = "Sunny day"

imageOL.image = UIImage(named: "Sunny")

**OR**

let a = Double(temperatureInput.text!) ?? 0.0                if( a >= 40.0){            imageDisplay.image = UIImage(named: "hot")            discriptionDisplayOL.text = "It is too Hot OutSide"        }        else if( a >= 15.0 && a < 40.0){            imageDisplay.image = UIImage(named: "Normal")            discriptionDisplayOL.text = "The weather is Nice"        }        else if( a < 15.0 && a > -4.0){            imageDisplay.image = UIImage(named: "cold")            discriptionDisplayOL.text = "It is cold OutSide"        }        else if( a < -4.0 && a >= -10.0){            imageDisplay.image = UIImage(named: "snow")            discriptionDisplayOL.text = "❄️ Snowing ❄️"        }        else{            imageDisplay.image = UIImage(named: "freezing")            discriptionDisplayOL.text = "Do not go outside. It is freezing"

      }

**OR**

Func calcTemp(Celsius: Double)->

(Double,Double){

var fahrenheit: Double

var kelvin: Double

fahrenheit = (celcius \* 9 / 5) + 32

kelvin = celsius + 273.15

return Fahrenheit,kelvin

}

//**Discount App**

**var** amount = Double(AmountInput.text!) ?? 0.00;

**var** discount = Double(discountRate.text!) ?? 0.00;

**var** result = Double((amount) - (amount \* discount/100.00))

displayOutletLabel.text = "Price after discount :\(result)"

**OR**

let input1 = Double(input1Outlet.text!)        let input2 = Double(input2Outlet.text!)                let amount = input1! - (input1! \* input2!/100)                outputOtlet.text = "Price after discount :$\(amount)"

//**Calculator App**

**class** ViewController: UIViewController {

**var** operand1 = -1.1

**var** \_operator = " "

**var** operand2 = -1.1

**@IBOutlet** **weak** **var** displayOutletLabel: UILabel!

**override** **func** viewDidLoad() {

**super**.viewDidLoad()

// Do any additional setup after loading the view.

}

**@IBAction** **func** Btn5Clicked(\_ sender: UIButton) {

displayOutletLabel.text = displayOutletLabel.text! + "5"

**if** (operand1 == -1.1){

operand1 = 5

}

**else**{

operand2 = 5

}

}

**@IBAction** **func** BtnPlusClicked(\_ sender: UIButton) {

displayOutletLabel.text = displayOutletLabel.text! + "+"

**if**(\_operator == " "){

\_operator = " +"

}

}

**@IBAction** **func** Btn3Clciked(\_ sender: UIButton) {

displayOutletLabel.text = displayOutletLabel.text! + "3"

**if**(operand2 == -1.1){

operand2 = 3

}

**else**{

operand1 = 3

}

}

**@IBAction** **func** BtnEqualsClicked(\_ sender: UIButton) {

displayOutletLabel.text = displayOutletLabel.text! + "="

displayOutletLabel.text = displayOutletLabel.text! + "\(operand1+operand2)"

}

}

//**Display Image App**

//Display the image

imageViewOL.image = UIImage(named:"MS. Dhoni")

//Dispaly the text and label

descriptionLabelOL.text = "Captain of 2011 Cricket World Cup!"

}

**//Vowels App**

// Read the text and assign it to the variable

**var** output1 = textInput.text!

**if**

output1.contains("a")||output1.contains("e")||output1.contains("i")||output1.contains("o")||output1.contains("u")

{

displauOutletLabel.text = "The entered text has vowels😀"

}

**else**{

displauOutletLabel.text = "The entered text has no vowels😒"

}

**//Image Exam**

testLBL.text=""

**if** (sender.tag == 4){

IMAGE.image = UIImage(named: "4")

testLBL.text = "POLITOICIAn POLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIAN"

}**else** **if** (sender.tag == 3){

IMAGE.image = UIImage(named: "3")

//testLBL.text="alien"

}**else** **if** (sender.tag == 1){

IMAGE.image=UIImage(named: "1")

testLBL.text="Graet SCIENTIST POLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIANPOLITOICIAN"

}

}

**//Car App**

|  |
| --- |
| //Read the name from the text field and store it in a variable |
|  |  |
|  | var name = cName.text! |
|  | //Read the number from the text field and store it in a variable |
|  | var number = cNumber.text! |
|  | //Perform the String interpolation and display the output |
|  | displaylabelOutlet.text = "🚘\(name)-\(number)🚘" |
|  |  |

**//Assignment 1**

**var** firstName = fName.text!

// read the last name and assign it to the variable

**var** lastName = lName.text!

// read the birth year and assign it to the variable

**var** birthYear = bYear.text!

//to calculate the age based on given birth year and current year

**let** date = Date()

**let** dateFormatter = DateFormatter()

dateFormatter.dateFormat = "yyyy"

**let** yearString = dateFormatter.string(from: date)

**var** y1 :Int = Int(birthYear) ?? 0

**var** y2 :Int = Int(yearString) ?? 0

**var** age :Int = y2-y1

// String interpolation to display

**var** output1 = "Full Name : \(lastName) \(firstName)"

**var** output2 = "Initials : \(lastName.first!) \(firstName.first!)"

**var** output3 = "Age : \(age)"

displayOutletLabel.text = "Details\r\r\(output1)\r\r\(output2)\r\r\(output3)"

}

**@IBAction** **func** resetClicked(\_ sender: UIButton) {

displayOutletLabel.text = ""

}

}

**//Calc Assignment**

//

// ViewController.swift

// Kshatriya\_CalculatorApp

//

// Created by Kshatriya,Srivyshnavi on 2/15/23.

//

**import** UIKit

**class** ViewController: UIViewController {

**var** num1:Double = -1.1

**var** num2:Double = 0

**var** res:Double = 0

**var** op = "+"

**var** isFirstNumberEnd: Bool = **false**

**@IBOutlet** **weak** **var** resultOutlet: UILabel!

**override** **func** viewDidLoad() {

**super**.viewDidLoad()

// Do any additional setup after loading the view.

**self**.resultOutlet.text = ""

}

**@IBAction** **func** clearAll(\_ sender: UIButton) {

resultOutlet.text = ""

num1 = 0

num2 = 0

}

**@IBAction** **func** clearButton(\_ sender: UIButton) {

resultOutlet.text=""

}

**@IBAction** **func** plusMinusButton(\_ sender: UIButton) {

**if**(op=="+"){

op = "-"

} **else**{

op = "+"

}

resultOutlet.text="\(op)"

}

**@IBAction** **func** divisionButton(\_ sender: UIButton) {

op = "/"

num1 = Double(resultOutlet.text!)!

resultOutlet.text=""

}

**@IBAction** **func** buttonSeven(\_ sender: UIButton) {

resultOutlet.text = resultOutlet.text! + "7"

}

**@IBAction** **func** buttonEight(\_ sender: UIButton) {

resultOutlet.text = resultOutlet.text! + "8"

}

**@IBAction** **func** buttonNine(\_ sender: UIButton) {

resultOutlet.text = resultOutlet.text! + "9"

}

**@IBAction** **func** multiplyButton(\_ sender: UIButton) {

op = "\*"

num1 = Double(resultOutlet.text!)!

resultOutlet.text=""

}

**@IBAction** **func** buttonFour(\_ sender: UIButton) {

resultOutlet.text = resultOutlet.text! + "4"

}

**@IBAction** **func** buttonFive(\_ sender: UIButton) {

resultOutlet.text = resultOutlet.text! + "5"

}

**@IBAction** **func** buttonSix(\_ sender: UIButton) {

resultOutlet.text = resultOutlet.text! + "6"

}

**@IBAction** **func** subtractionButton(\_ sender: UIButton) {

op = "-"

num1 = Double(resultOutlet.text!)!

resultOutlet.text=""

}

**@IBAction** **func** buttonOne(\_ sender: UIButton) {

resultOutlet.text = resultOutlet.text! + "1"

}

**@IBAction** **func** buttonTwo(\_ sender: UIButton) {

resultOutlet.text = resultOutlet.text! + "2"

}

**@IBAction** **func** buttonThree(\_ sender: UIButton) {

resultOutlet.text = resultOutlet.text! + "3"

}

**@IBAction** **func** additionButton(\_ sender: UIButton) {

op = "+"

num1 = Double(resultOutlet.text!)!

resultOutlet.text=""

}

**@IBAction** **func** buttonZero(\_ sender: UIButton) {

resultOutlet.text = resultOutlet.text! + "0"

}

**@IBAction** **func** decimalButton(\_ sender: UIButton) {

**if**(!resultOutlet.text!.contains("."))

{

resultOutlet.text = resultOutlet.text! + "."

**return**

}

}

**@IBAction** **func** percentageButton(\_ sender: UIButton) {

op = "%"

num1 = Double(resultOutlet.text!)!

resultOutlet.text=""

}

**@IBAction** **func** equalsButton(\_ sender: UIButton) {

num2 = Double(resultOutlet.text!)!

**switch** op {

**case** "+":

res = num1+num2

resultOutlet.text = String(res)

**case** "-":

res = num1-num2

resultOutlet.text = String(res)

**case** "\*":

res = num1\*num2

resultOutlet.text = String(res)

**case** "/":

res = num1/num2

**if**(num2==0){

resultOutlet.text="Not a number"

}

**else**{

**let** newresult=round( res\*100000)/100000

resultOutlet.text = String(newresult)

}

**case** "%":

res = num1.truncatingRemainder(dividingBy: num2)

**let** result2=round(res\*10)/10

resultOutlet.text = String(result2)

**default**:

resultOutlet.text = "Not a number"

}

**let** splitresponse = resultOutlet.text!.components(separatedBy: ".")

**let** testresponse = resultOutlet.text

**if**(!(testresponse == "Not a number")){

**if**(splitresponse[1]=="0"){

resultOutlet.text = splitresponse[0]

}

}

}

}

NEW

@IBOutlet weak var displayLabel: UILabel!

override func viewDidLoad() {

super.viewDidLoad()

// Do any additional setup after loading the view.

displayLabel.text = ""

}

@IBAction func calculationOfBMI(\_ sender: Any)

{

//reading the height in feet and storing it in a variable heightFT

let heighFT = Double(heightinFeetOutlet.text!) ?? 0.0

//reading the height in inches and storing it in a variable heightInches

let heightInches = Double(heightinInchesOutlet.text!) ?? 0.0

//converting the height in feet to inches to calculate the total height in inches

let height = (heighFT\*12) + heightInches

//reading the weight in lbs and storing it in a variable weight

let weight = Double(weightOutlet.text!) ?? 0.0

// calculating the BodyMassIndex based on the givn formula

let bm = (703\*weight) / (height\*height)

//rounding up the BMI to one decimal value

let BMI = round(bm \* 10)/10.0

//Displaying the image and the output based on the BMI

if(BMI <= 18.5){

imageOulet.image = UIImage(named: "underWeight")

displayLabel.text = "Your Body Mass Index is \(BMI).\nThis is considered UnderWeight."

}

else if(BMI >= 18.6 && BMI

<= 24.9){

imageOulet.image = UIImage(named: "normal")

displayLabel.text = "Your Body Mass Index is \(BMI).\nThis is considered Normal👍."

}

else if( BMI >= 25 && BMI <= 29.9 ){

imageOulet.image = UIImage(named: "overWeight")

displayLabel.text = "Your Body Mass Index is \(BMI).\nThis is considered OverWeight."

}

else if(BMI >= 30.0){

imageOulet.image = UIImage(named: "obese")

displayLabel.text = "Your Body Mass Index is \(BMI).\nThis is considered Obesity."

}

--------------

class ViewController: UIViewController {

var heartTax = 11.75

var brainTax = 13.5

var kneeTax = 6.25

@IBOutlet weak var nameOL: UITextField!

@IBOutlet weak var surgeryOL: UITextField!

@IBOutlet weak var costOL: UITextField!

@IBOutlet weak var displayLabel: UILabel!

@IBOutlet weak var imageViewOL: UIImageView!

override func viewDidLoad() {

super.viewDidLoad()

// Do any additional setup after loading the view.

}

@IBAction func buttonCalc(\_ sender: Any) {

//Read the input

let name = nameOL.text!

let surgeryType = surgeryOL.text!

let cost = Double(costOL.text!)

//display the output in display label & Images in imgae view

if (surgeryType == "Heart" && cost == 3000.5){

let totalCost = Double((cost!)\*(1 + 11.75/100)) - Double(500)

let tCost = round(totalCost\*100) / 100.0

displayLabel.text = "\(name): \rTotal cost for Heart🫀 srgery is $\(tCost) "

imageViewOL.image = UIImage(named: "Heart1")

}

else if (surgeryType == "Brain"){

let totalCost = Double((cost!)\*(1 + 13.5/100)) - Double(750)

let tCost = round(totalCost\*100) / 100.0

displayLabel.text = "\(name): \rTotal cost for Brain🧠 srgery is $\(tCost) "

imageViewOL.image = UIImage(named: "Brain1")

}

else if (surgeryType == "Knee replacement" && cost == 1500.75){

let totalCost = round(Double((cost!)\*(1 + 6.25/100)) - Double(350))

let tCost = round(totalCost\*100) / 100.0

displayLabel.text = "\(name): \rTotal cost for Knee replcement🦿 surgery is $\(tCost) "

imageViewOL.image = UIImage(named: "Knee1")

}

else{

displayLabel.text = "Enter all deatails"

imageViewOL.image = UIImage(named: "noResults1")

}

}

}