

# WORKSHOP ON SWIFT PROGRAMMING

MOBILE APPLICATION DEVELOPMENT LANGUAGE

ON 6<sup>TH</sup> OCTOBER 2017

AT SACRED HEART COLLEGE

REPORT SUBMITTED BY

I – M.Sc-CS[BOYS]  
DEPARTMENT OF CS  
DON BOSCO COLLEGE  
DHARMAPURI.

C / I : *S. P. J.*

HOD : *me*



# SACRED HEART COLLEGE(AUTONOMOUS)

## Workshop on SWIFT Programming

### Mobile Application Development

ON 6<sup>TH</sup> OCTOBER 2017

#### Agenda

- Inauguration
- Workshop Begins
  - ✓ Session – I
  - ✓ Session – II
  - ✓ Session – III
  - ✓ Session – IV
  - ✓ Session – V
- Valediction

#### INAUGURATION:

The inaugural function was very simple and short for time consumption. In this inaugural,

- Prayer Song
- Welcome Address

#### Welcome Address:

- ❖ The Welcome Address was given by the “Principal of The Sacred Heart College”.
- ❖ The Speech was very nice, motivational and useful for us.

#### WOKSHOP BEGINS:

- ❖ The workshop begins at 09:30 A.M. and ends at 05:00 P.M.
- ❖ This workshop has five sessions:
  - Session – I
  - Session – II
  - Session – III
  - Session – IV
  - Session – V



### Session – I

- ❖ This session is handled by “Dr.A. Mekala, Asst. Professor of Sacred Heart College”
- ❖ This session is based on the “Basics of Swift”
- ❖ The topics which we have seen in this session are
  - **Swift Comments and its Types**
  - **Swift Datatypes**
  - **Swift Variables**
  - **Swift Constant**
  - **Swift Literals**
- ❖ Some explanations of above topics are enclosed.

### Session – II

- ❖ This session is handled by “Ms.Deepika Ranjan, Asst. Professor of Sacred Heart College”
- ❖ This session is based on the “Objective-C with Swift”
- ❖ The topics which we have seen in this session are
  - **Operators**
  - **Decision Making**
  - **Loops**
  - **Strings**
  - **Character**
  - **Array**
  - **Dictionaries**
- ❖ Some explanations of above topics are enclosed.

### Session – III

- ❖ This session is handled by “Mr.T. Prabakaran, Asst. Professor of Sacred Heart College”
- ❖ This session is based on the “Developing an Apple App”
- ❖ The topics which we have seen in this session are
  - **Develop a Sample Calculator App.**
  - **Develop a Odd or Even App.**



#### Session – IV

- ❖ This session is handled by “Mr.V.S. Jayakumar Paul Bosco, Asst. Professor of Sacred Heart College”
- ❖ This session is based on the “Implementation of Swift”
- ❖ The topics which we have seen in this session are
  - Functions
  - Closures
  - Enumerations
  - Structures
  - Classes
  - Properties
  - Methods
- ❖ Some explanations of above topics are enclosed.

#### Session – V

- ❖ This session is handled by “Ms.J. Merlin Florence, Asst. Professor of Sacred Heart College”
- ❖ This session is based on the “Classes and OOPS with Swift”
- ❖ The topics which we have seen in this session are
  - Subscript
  - Inheritance
  - Initialization
  - Deinitialization
  - Type casting
  - Extensions
  - Protocols
- ❖ Some explanations of above topics are enclosed.

#### VALEDICTION

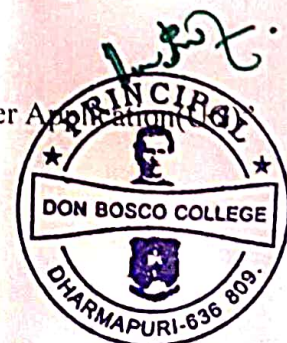
- ❖ The valediction function is so short and sweet. The valediction function is made up of to content namely,
  - Certificate Distribution
  - Vote of Thanks

#### Certificate Distribution:

- The certificates are distributed by “The Vice-Principal, Sacred Heart College”.

#### Vote of Thanks:

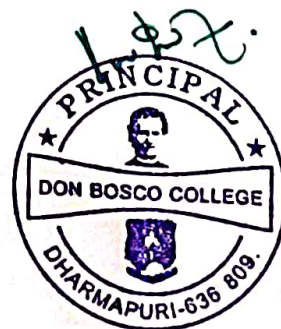
- The vote of thanks given by the “Student Secretary, Dept. of Computer Applications”





**REPORT ENCLOSES:**

- Advertise of the Workshop
- PowerPoint about the topics
- Certificate Xerox
- Permission Letter

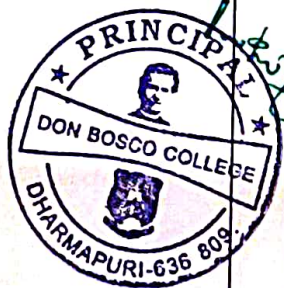


*Workshop on SWIFT Programming*

**Registration Form**

**06.10.2017**

Name :  
Staff/Student :  
Gender :  Male  Female  
Course :  
Department :  
Institution :  
Address :  
  
Tel/Mob.No :  
E-Mail :  
DD Amount :  
DD No & Date :  
Bank :



Signature

**PATRON**

Rev. Dr. C. Antonyraj, SDB

**PRINCIPAL**

Rev. Dr. D. Maria Antony Raj, SDB

**ADDITIONAL PRINCIPAL**

Rev. Dr. K. A. Maria Arokiaraj, SDB

**HEAD**

Dr. M. Maria Dominic

**CONVENER**

Mr. A. Selvaraj Jeyakumar

**ORGANIZING COMMITTEE**

Mr. R. Karthik

Mr. A. Selvaraj Jeyakumar

**CONTACT**

selvarajjk@shcpt.edu

(Mob.No.9524908412)

(Mob.No.9994178289)

**Workshop on SWIFT  
Programming**

**6<sup>th</sup> October 2017**

**Venue – Carreno Hall**



*Mobile Application Development Language*

*Organized by*



**DEPARTMENT OF COMPUTER APPLICATIONS (UG)**



**Sacred Heart College (Autonomous)**

**Tirupattur – 635 601**

**Vellore District, Tamil Nadu.**



# BASICS OF SWIFT

Dr.A.Mekala  
Asst.Professor  
Dept of BCA

## INTRODUCTION

- Swift is a new programming language developed by Apple Inc for iOS(phone) and OS X (PC) development.
- "Swift for Windows" is a free, open source tool that provide runtime environment for swift programming language to compile and run on Windows OS with graphical interface.
- Swift is easy to use and open source, so anyone with an idea can create something incredible.



*Swift. A powerful open language that lets everyone build amazing apps.*

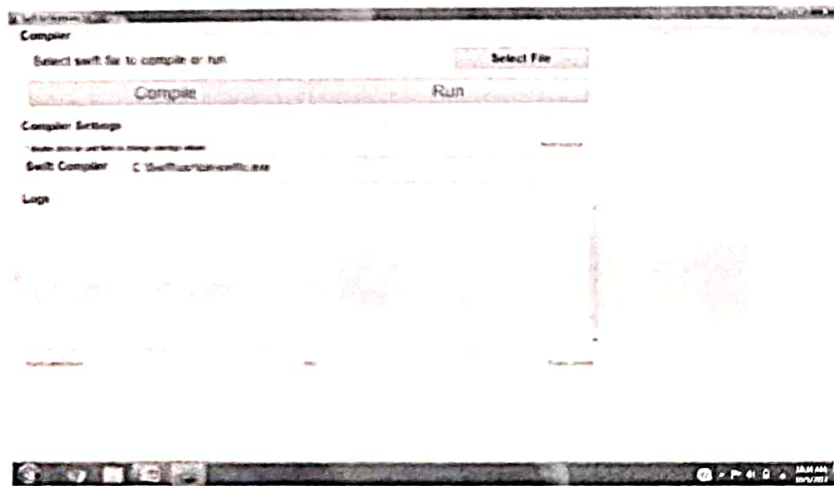
**Step 1:** Write a basic program in Swift with your favorite editor.

A screenshot of a Swift code editor window. The window title is "Swift - [Untitled]". The menu bar includes "File", "Edit", "Format", "View", and "Help". The code area contains the following Swift code:

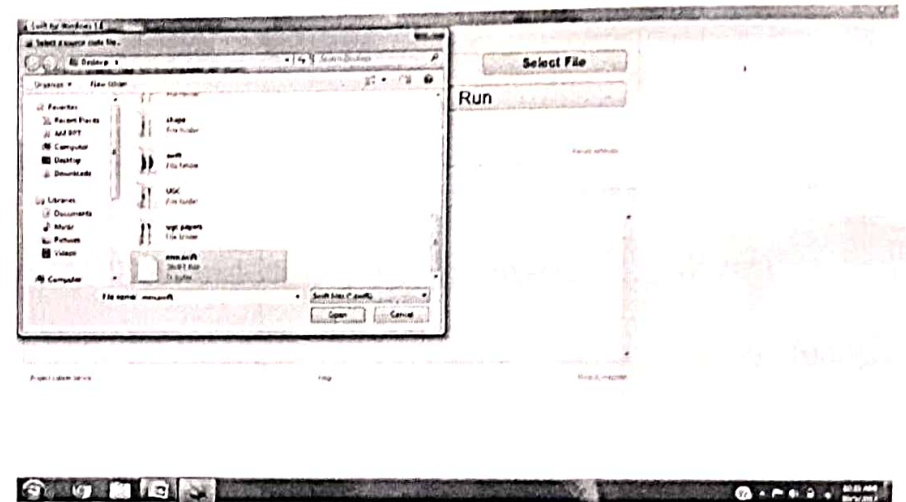
```
let pi = 3.14159
print(pi)
```

The window also shows a standard macOS-style window control bar at the bottom with minimize, maximize, and close buttons.

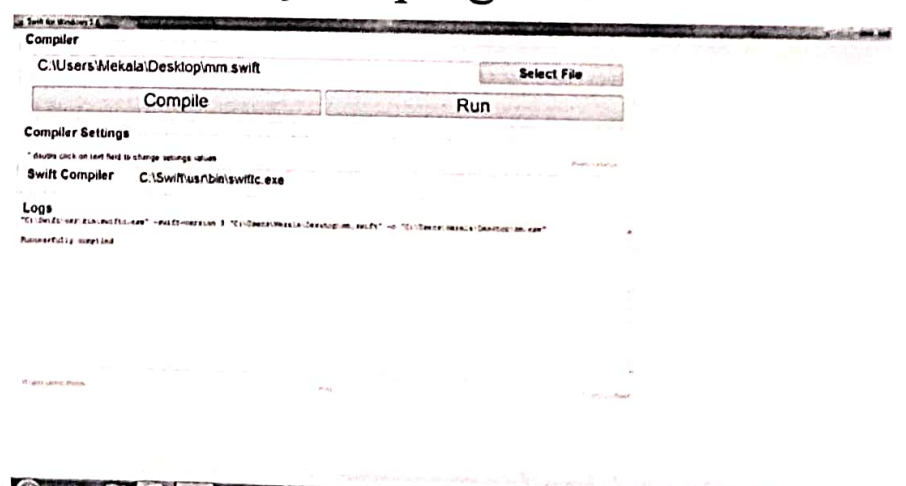
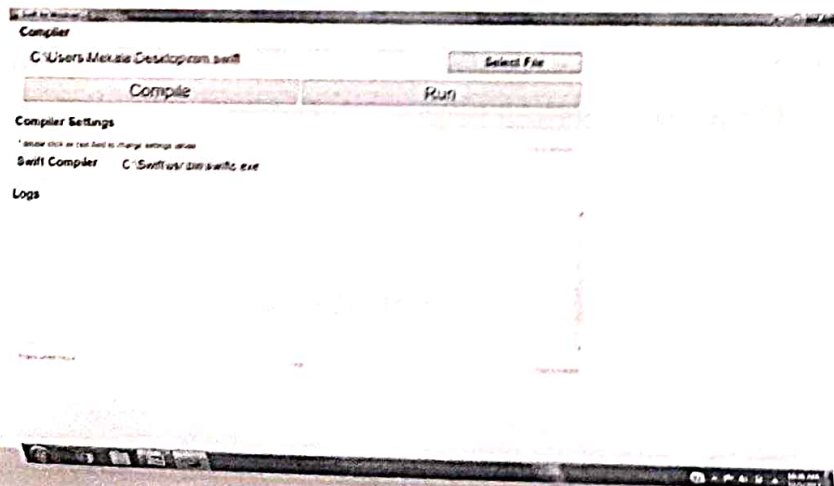
## Step 6: Click select File menu



## Step 7: Choose your swift file



## Step 8: Click 'Compile' to compile your program.





### Example : Single Line Comment

```
//Sample program
//stores 3.14 in variable pi
let pi = 3.14159
print(pi)
```

#### Output:

3.14159

The above example contains two single line comment:

```
// Sample program
// stores 3.14 in variable pi
```

### Example 2: Multiline comment

```
/* Hardcoded pi value may be less accurate.
So you can calculate using in built data types for more
accurate value */
```

```
let pi = Double.pi
print(pi)
```

Output: 3.141

The above example contains a multiline comment.

```
/* Hardcoded pi value may be less accurate.
So you can calculate using in built data types for more accurate
value */
```

## Multiline Comments

- Multiline comments start with ,
  - ✓ If your comment includes multiple line, you can enclose it inside `/*...*/`.
  - ✓ Forward-slash followed by an asterisk (`/*`)
  - ✓ End with an asterisk followed by a forward-slash (`*/`):

## Semicolons in Swift Language

- However, semicolons *are* required if you want to write multiple separate statements on a single line:

```
let cat = "meow"; print(cat)
// Prints "meow"
```

- If you need to add multiple statements in a single line, you must include ";" at the end of the statement.

## Example 2: Integer data type

```
var highScore:Int = 100
print(highScore)
highScore = -100
print(highScore)
```

When you run the program, the output will be:

```
100
-100
```

## Example : Float data type

```
let highScore:Float = 100.232
print(highScore)
```

When you run the program, the output will be:

```
100.232
```

## Floating-Point Numbers:

- The Swift floating point data types are able to store values containing decimal places.
- **Double** stands for Double means if we want to allocate the large number with fraction value then we use Double as a float data-type.
- Floating-point numbers are numbers with a fractional component, such as 3.14159, 0.1, and -273.15.
- Double represents a 64-bit floating-point number.
- Float represents a 32-bit floating-point number.

## Example : Double data type

```
let highScore:Double = 100.232321212121
print(highScore)
```

When you run the program, the output will be:

```
100.232321212121
```

# Sacred Heart College (Autonomous)

Tirupattur, Vellore Dist, Tamil Nadu. 635601

Affiliated to Thiruvalluvar University, Accredited by NAAC (3rd Cycle) with 'A' Grade (3.43)

DEPARTMENT OF COMPUTER APPLICATIONS(UG)



This is to certify that Mr/Mrs .....YOGESHWAR...S..... has participated in  
the State Level Workshop on SWIFT PROGRAMMING held on 06<sup>th</sup> October 2017.

Mr. A. Selvaraj Jeyakumar  
Convenor



Dr. M. Maria Dominic  
Head



Dr. D. Maria Antony Raj  
Principal



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Principal





# DON BOSCO COLLEGE

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## PG Department of Social Work (MSW)

### CATHARSIS 2K17 – A National Level Cultural Meet For Budding Social Workers

22.09.2017 – 23.09.2017  
BISHOP HEBER COLLEGE,  
TIRUCHIRAPALLI



## CATHARSIS 2K23 – A National Level Cultural Meet for Budding Social Workers

### **Address of the Program:**

Bishop Heber College (Autonomous), Tiruchirappalli – 620017

### **Date & Day of the Program:**

22/09/2017 (Wednesday) - 23/09/2017 (Thursday)

### **Venue of the Program:**

Multi-Purpose Auditorium

### **Time Spent:**

08:30 am – 06:30 pm (10 hours)

### **Report of the Program:**

The 1<sup>st</sup> & 2<sup>nd</sup> MSW - PG department of Social Work, Don Bosco College, Dharmapuri, has participated in the CATHARSIS which was organized by the department of Social Work, Bishop Heber College (Autonomous), Tiruchirappalli. Totally 24 of us have attended this competition (1<sup>st</sup> MSW – 12 participants; 2<sup>nd</sup> MSW – 10 participants; Staff – 2).

Participated in: Group Song, Mime, Street Play, Variety, Documentary, Quiz, Rangoli, Poster Presentation, Short Story Writing, Collage, Face Painting, Photography & Poetry Writing which are organized by Social Work trainees of Bishop Heber College (Autonomous), Tiruchirappalli. The team scored: 1<sup>st</sup> in Puppetry, 2<sup>nd</sup> in Short Story Writing and 3<sup>rd</sup> in Face Painting.

