Assignment No: 5

Title: Compare the iOS and android operating system

An operating system (OS) is a collection of programmes that manage computer hardware and provide standard services to software applications. It functions as a link between the user and the hardware. It is in charge of carrying out all procedures. There are numerous operating systems available for mobile devices, PCs, and other devices. iOS and Android are two examples of such operating systems. The distinctions between them are as follows.

iOS :

The iPhone's operating system is known as iOS. It was created in 2007 by Apple Inc. Following its original release in 2007 for the first generation iPhone, the iOS operating system has been upgraded to accommodate a broader range of Apple products, including the iPod Touch and iPad. iOS is a Unix-like operating system based on the Darwin (BSD) operating system.

It is the world's second most popular mobile operating system behind Android. It is written primarily in Swift, Objective C, C++, and assembly code. iOS 13.1 is the most recent stable release.

Android Operating System :

Android OS is a mobile operating system created by Android Inc. in October 2003. Their primary goal was to develop an enhanced operating system for cameras. It was later acquired by Google in 2005 and debuted in 2008. It is a framework built on the Linux kernel. Android features a user-friendly interface, making it simple to operate. Users can quickly download different software, which extends the capability of the operating system. Nowadays, Android is the most popular and widely used operating system.

Android is often updated, and each edition is given a new name. Dalvik Virtual Machine is the name given to the virtual machines used by Android platforms. This operating system is free and opensource software (FOSS), as defined by the Apache License. It is known as the Android Open Source Project (AOSP) at its heart.

Difference between iOS and Android

The following table compares and contrasts the important features of iOS and Android operating systems

Characteristic	IOS	Android OS
Developer	Apple	Google
Devices	Apple devices only (iPhone, iPad, iPod touch)	A wide range of devices from different manufacturers
Open source	No	Yes
App store	Apple App Store	Google Play Store
Customization	Limited	Extensive
Security	Generally considered to be more secure	Generally considered to be less secure
Updates	Timely and consistent	Can vary depending on the manufacturer and device
Price range	Generally, more expensive	Generally less expensive
Released Date	July 29, 2007	September 23, 2008
Kernel Mode	Hybrid	Linux
Based on	OS X and Unix	Linux
Programming Languages	Swift, Objective−C, C, and C++	C, C++, Java, and other languages
Mostly Used Language to create Application	Swift	Java and Kotlin