

Task-1

Why Kotlin is preferred over the other programming languages for android development ?

Solution:- Kotlin is a new open source programming language for modern multi platform applications that is based on the Java Virtual Machine (JVM). Interestingly, Kotlin is designated as the official language of Android. In 2019 the Kotlin became the number one language for Android development. And Kotlin has a simple syntax, which can be quite useful, especially for the people who are just getting started. Most popular companies around the world are realizing the benefits of Kotlin language, which means that there is a higher demand for a Kotlin programmers.

1. Easy to Learn.
2. Code Readability.
3. Non-Null Types.
4. Code safety.
5. Multi-platform Support.

Task-2

OUTPUT:

```
Happy Birthday, Shubham
  | | | | |
  =====
  @@@@@@@@@@
  {~@~@~@~}
  @@@@@@@@@@
```

Task-3

How to declare Variable in Kotlin:

Kotlin uses two different keyword to declare variables which is val and var. Where val is use for a variable whose value never changes and you can not reassign a value to variable that was declared using val.

Difference between var and val:

Var and val are both used to declare variables in Kotlin language. However, there are some key differences between them:

var(variable): It is a general variable. The value of a variable that is declared using var can be changed anytime throughout the program. Var is also called mutable and non-final variable, as there value can be changed anytime.

Example:

```
fun main()
{
    var age=20 println("The current
    age is "+age)
    age=30
    println("New age is "+age)
}
```

val: The object stored using val cannot be changed, it cannot be reassigned, it is immutable.

Example:

```
fun main()
{
    val age=20 println("The current
    age is "+age) age=30
    println("Newage is
    "+age)
}
```