ANDROID DEVELOPMENT TUTORIAL QUESTIONS

OBJECTIVE

- 1. Is a software only a program?
 - A) YES
 - B) NO
- 2. Which company built kotlin and Android Studio?
 - A) JetBrains
 - B) Oracle
 - C) Google
- 3. Is Mobile a major target device for development?
 - A) YES
 - B) NO
- 4. Which target device category is Laptop under?
 - A) Mobile
 - B) Desktop
 - C) Web
- 5. Can you say an image is a part of a software?
 - A) YES
 - B) NO
- 6. Front-end handles...
 - A) The logic of the software.
 - B) The Interface of the software.
 - C) The marketing of the software.
- 7. Back-end handles...
 - A) The logic of the software.
 - B) The Interface of the software.
 - C) The marketing of the software.
- 8. Is a text editor and IDE exactly the same?
 - A) YES
 - B) NO
- 9. What is the first stage of developing a software?
 - A) Maintenance.
 - B) Implementation.
 - C) Design.
 - D) Feasibility Study/Planning
- 10. Immediately the coding or implementation is finished, you are expected to?
 - A) Test
 - B) Deploy
 - C) Maintain

11. The Java we are using is Proprietary?A) YESB) NO
12. What IDE are we using for coding Pure Kotlin?A) JetBrainsB) Android StudioC) IntelliJ
13. What Programming Language are we using to develop?A) JavaB) KotlinC) C++
14. Is NULL a value? A) YES B) NO
15. Which among the below is not a data type in Kotlin?A) IntegerB) DecimalC) DoubleD) String
16. What is the operator for addition? A) + B) // C) -
17. What is the keyword you must put before the mutable variable name?A) nameB) kotlnC) varD) val
18. Which of the below is used to display to the terminal/command prompt?A) showB) glowC) println
19. What is used to take input from the keyboard?A) printlnB) readlnC) readLine.D) taKe
20. What is == used for? A) Comparing B) Assigning

C) Math

- 21. What is the keyword for declaring a function?
 - A) func
 - B) function
 - C) fun
- 22. What does != stand for?
 - A) Not null
 - B) Is null
 - C) Not Equal to.

```
fun displayArrayContents(arrayWithContent:String):Unit{
    for(content in arrayWithContent){
        println(content)
    }
}
var fullName = mutableListOf("Jack","Benjamin","Sparrow")

fun main(){
    println("Hello")
}
```

- 23. What would the code snippet above display in the terminal?
 - A) All content in the list.
 - B) YES
 - C) NO
 - D) Hello
- 24. From the code snippet, would the "displayArrayContents" run?
 - A) YES
 - B) NO
- 25. From the code snippet, what data type would the "displayArrayContents" return?
 - A) Integer
 - B) Double
 - C) Nothing would be returned
- 26. From the code snippet, how many times did the for loop iterate?
 - A) 1
 - B) 2
 - C) 3
 - D) 0
- 27. From the code snippet, does "displayArrayContents" have a parameter?
 - A) YES
 - B) NO

```
fun displayArrayContents(arrayWithContent:String):Unit{
    for(content in arrayWithContent){
        println(content)
    }
}
var fullNameListForm = arrayOf("Jack","Benjamin","Sparrow")

fun main(){
    displayArrayContents("Hello")
}
```

- 28. From the code snippet, what would be displayed in the terminal?
 - A) Hello as a single word.
 - B) Each letter of the word hello.
- 29. From the code snippet, is the variable fullNameListForm mutable?
 - A) No
 - B) Yes
- 30. Does Kotlin support Null?
 - A) YES
 - B) NO

- 31. Is an object a template of a class?
 - A) YES
 - B) NO
- 32. What keyword is used to declare a class?
 - A) JetBrains
 - B) variable
 - C) ction
 - D) class
 - E) Google
- 33. Can classes be extended?
 - A) YES
 - B) NO
- 34. Is there a type of class called Data Class?
 - A) YES
 - B) NO
- 35. What a class is instantiated, what method in the class runs first?
 - A) Construct.
 - B) Main
- 36. Can a class construct take parameter?
 - A) NO
 - B) YES

- 37. Does Kotlin have a do-while loop?
 - A) YES
 - B) NO
- 38. Does Kotlin have a do-while loop?
 - A) YES
 - B) NO
- 39. Does Kotlin have a while statement?
 - A) YES
 - B) NO
- 40. Which of the below is used to comment a single line in kotlin?
 - A) /
 - B) //
 - C) #

SUBJECTIVE

- 1. A software is a program and other _____ files.
- 2. JetBrains built Kotlin on top of _____.
- 3. Are we using opensource java?
- 4. Is Android Opensource?

```
var schoolName:Int = "Holy Cross"

fun main(){
    println(schoolName)
}
```

- 5. What would be the output?
- 6. Why would the output above be that?
- 7. What would you edit in the above code snippet?

```
var fullNameArrayForm = arrayOf("Jack","Benjamin","Sparrow")
var firstName = "Jack"

fun main(){
    println(fullNameArrayForm)
}
```

- 8. What would the output of the program be?
- 9. The variable firstName is what data type??

- 10. Is the variable firstName a mutable variable?
- 11. Can a variable be declared outside the main function?
- 12. Can an immutable variable be declared outside the main function?
- 13. There are two categories of variable, namely immutable and ______
- 14. Any single symbol is known as what data type?
- 15. A collection of symbols like alphabets, and numbers is known as what data type?
- 16. A decimal is what type of data type?
- 17. A whole number is what type of data type?
- 18. Which company owns Java?
- 19. Can Kotlin work in IntelliJ?
- 20. Which company built Kotlin?
- 21. Which company owns Android?
- 22. Is android opensource?
- 23. What is the file extension of Kotlin?
- 24. Does data class contain any functionality?
- 25. What does ".." operator mean?
- 26. What logical operator do you use to compare strings?

```
var fullNameArray = arrayOf("Jack","Benjamin","Sparrow")
val firstName = "Jack"
```

- 27. In the code snippet, is line 1 a proper declaration of an array?
- 28. In the code snippet, can you change the content of firstName variable to "Johnson"?
- 29. Is the integer datatype a decimal number?
- 30. Can String be converted to Integer?
- 31. Can an integer be converted to string or integer?
- 32. Can a variable outside the main function be used in the main function?
- 33. Can an array outside the main function be used in the main function?

- 34. Can a val variable be declared outside the main function?
- 35. Is the when in kotlin, almost similar to the switch in Java?
- 36. Can a class contain a variable?
- 37. Can a class have a functions/methods?
- 38. Does a data class have functions/methods?
- 39. Does a data class have variables?
- 40. Can a string be converted to Double?

THEORY

- 1. Write a block of code that simulate, a login system.
 - 1. It should enable the user signup.
 - 2. It should enable the user login.
 - 3. It should enable the user logout.
- 2. Explain what are variable is and the different categories of a variable.
- 3. Write a code to display each item in a list/array.
- 4. List and explain 2 products from JetBrains.
- 5. What does Open Source mean?
- 6. List and explain the Major 3 target devices for Software Development.
- 7. What are the various section/part of a software?
- 8. List and Explain 4 data types in Kotlin.
- 9. Write a block of code(not more than 5 lines) to Display number 1 to 10.
- 10. Write a block of code(not more than 5 lines) to Display even numbers in the range of 1 to 10.
- 11. Write and Explain the two ways of commenting.
- 12. List 2 ways to monetize your software.

PRACTICAL

1. Design a basic app, that adds two numbers together and displays it to the user.