1. Below is the variable I have declared in scala. I want to display 3.142 as output. How can we achieve using scala?

val pi : Double = 3.14159265

2. Below is the variable I have declared in scala. I want to display 00001 as output. How can we achieve using scala?

val numberOne : Int = 1

3. Below is the variable I have declared in scala. I want to display 42 as output. How can we achieve using scala?

val data: String = "To life, the universe, and everything is 42."

4. Below are the variables "isGreater", "isLesser" I have declared in scala. What is the output for variables "impossible", "anotherWay" in scala?

val isGreater = 1 > 2 val isLesser = 1 < 2

val impossible = isGreater & isLesser val anotherWay = isGreater && isLesser

5. Below are the variables "picard", "bestCaptain" I have declared in scala. Will the declaration of "isBest" be correct? If yes then what will be the output?

val picard: String = "Picard"

val bestCaptain: String = "Picard"

val isBest: Boolean = picard == bestCaptain

- 6. Will the below statement execute in Scala? If yes then what will be the output? println({val x = 10; x + 20})
- 7. How to access the first element of below variables "captainStuff", "shipList"?

```
val captainStuff = ("Picard", "Enterprise-D", "NCC-1701-D")
val shipList = List("Enterprise", "Defiant", "Voyager", "Deep Space Nine")
```

8. Below is the variable "shipList" I have declared in scala. Can you draw below expexted output in scala?

val shipList = List("Enterprise", "Defiant", "Voyager", "Deep Space Nine")

**Expected output:** 

esirpretnE tnaifeD regayoV eniN ecapS peeD

9. Below are the variables "numberList", "moreNumbers" I have declared in scala. Will the declaration of "lotsOfNumbers" be correct? If yes then what will be the output?

```
val numberList = List(1, 2, 3, 4, 5)
val moreNumbers = List(6, 7, 8)
```

## val lotsOfNumbers = numberList ++ moreNumbers

10. Below is the variable "numberList" I have declared in scala. What will be the output for below scenario's?

```
val numberList = List(1, 4, 3, 3, 2, 5, 5, 6)
```

- a) how to display numbers in reverse order. Ex -> List(6, 5, 5, 2, 3, 3, 4, 1)
- b) how to display numbers in sorting order. Ex -> List(1, 2, 3, 3, 4, 5, 5, 6)
- c) how to find max value in above list.
- d) how to find the sum of values in the above list.
- e) how to find unique values in the above list. Ex -> List(1, 2, 3, 4, 5, 6)
- 11. If I am passing 1 then it should display January total days, 2 then it should display February total days, 3 then March total days, upto 12 then December total days. But In feb month if it is a leap year or non leap year then it should display the exact day. What can you do in scala?
- 12. What are all the types of Bitwise Oprators, Assignment Oprators in Scala. Explain with Example?
- 13. What is the break statement in scala. Explain with Example?
- 14. What is function composition, Explain with example?
- 15. What is Constructor overloading in scala, write example?
- 16. Based on input(single word ex "hello" or "123hai" or "#hashtag") whatever I am giving you need to find the first letter of a word, whether it is number or the alphabet or special char and return that char. If its alphabet then find it in upper or lower case then return.
- 17. How will you get the add/sum of 1,2,3,4,5,6,7,8,9 these numbers by passing all those into a

single UDF?

18. How do you display below output,

Input: "MMLLSSLLMMSSM"

Expected output: "SSSSMMMMMLLLL"

19 .How to do ordering for below List elements?

```
val list = List("abc","a","abcde")
```

20. How to reverse data/sentence in scala? Example reverse below var "x".

```
val x = "scala is awesome lang"
```

21. How to get below output? - want to reverse odd or even element of the string, how to achieve.

val x = "scala is awesome lang"

**Expected output: scala si awesome gnal** 

- 22. What is Hashmap in scala? Write an example?
- 23. What is closure in scala, Give example
- 24. What is function currying in scala?
- 25. What is the Higher order function in scala?
- 26. Write a simple program to find Fibonacci numbers in Scala?