**Rat 3**

**Quiz 1.**

fun probabilityOfCarryingUmbrella(isSunny: Boolean): Float {

return if (isSunny) {

0.3f

} else {

0.6f

}

}

If isSunny is true, the probability of carrying an umbrella is 0.3 (or 30%). In this function, the input parameter isSunny is a boolean value indicating whether it is sunny or not. The function returns a float value representing the probability of Rose carrying an umbrella.

Otherwise, if it's not sunny, the probability of carrying an umbrella is 0.6 (or 60%). The remaining probability, in either case, is the probability of not carrying an umbrella.

To use this function, you can simply call it with the appropriate boolean value, like so:

val sunny = true

val probability = probabilityOfCarryingUmbrella(sunny)

println("The probability of Rose carrying an umbrella is $probability when it is sunny: $sunny")

This will output the probability of Rose carrying an umbrella when it is sunny, which in this case would be 0.3.

**Quiz2 .**

class Student(val name: String, val age: Int)

fun main() {

val student1 = Student("Alice", 16)

val student2 = Student("Bob", 17)

val student3 = Student("Charlie", 15)

println("Name: ${student1.name}, Age: ${student1.age}")

println("Name: ${student2.name}, Age: ${student2.age}")

println("Name: ${student3.name}, Age: ${student3.age}")

}

**Quiz 3**

class MyCars {

val name: String = "Subarus"

var number: Int = 23

init {

println("I have $number $name in my garage")

}

}

Explanation of changes made:

The class name should start with a capital letter (**MyCars instead of myCars**).

The type **string** should be capitalized as **String.**

The variable ‘**number’** should have an explicit type (‘**Int’**).

The variable **Name** should be renamed to **name** to follow Kotlin naming conventions.

The string inside the **println** statement should use **$** to interpolate the values of **number** and **name.**

The extra **}** at the end of the class should be removed.

To run the code, you can create an instance of the **MyCars** class in your main function:

fun main() {

val myCars = MyCars()

}

**Quiz 4.**

// Default values for statistics

var femaleVotes = 0

var maleVotes = 0

var spoiltVotes = 0

// Function to display election results

fun displayResults() {

println("Female votes = $femaleVotes")

println("Male votes = $maleVotes")

println("Spoilt votes = $spoiltVotes")

}

// Function to increase male votes by a given amount

fun increaseMaleVotes(amount: Int) {

maleVotes += amount

}

// Set the initial values for the election results

femaleVotes = 120

maleVotes = 50

spoiltVotes = 22

// Display the initial results

displayResults()

// Increase the male votes by 20

increaseMaleVotes(20)

// Display the updated results

displayResults()

When you run it will be;

Female votes = 120

Male votes = 50

Spoilt votes = 22

Female votes = 120

Male votes = 70

Spoilt votes = 22

**Quiz 5.**

class ExampleClass {

val name: String

val age: Int

init {

name = "John Doe"

age = 30

}

init {

println("Initializing properties...")

}

}

fun main() {

val example = ExampleClass()

println("Name: ${example.name}, Age: ${example.age}")

}

In this example, we define a class ExampleClass with two properties: name of type String and age of type Int. We use two init blocks to initialize these properties.

In the first init block, we set name to "John Doe" and age to 30. In the second init block, we print a message to the console to indicate that the properties are being initialized.

In the main function, we create an instance of ExampleClass and print the values of its name and age properties. The output of this program will be: