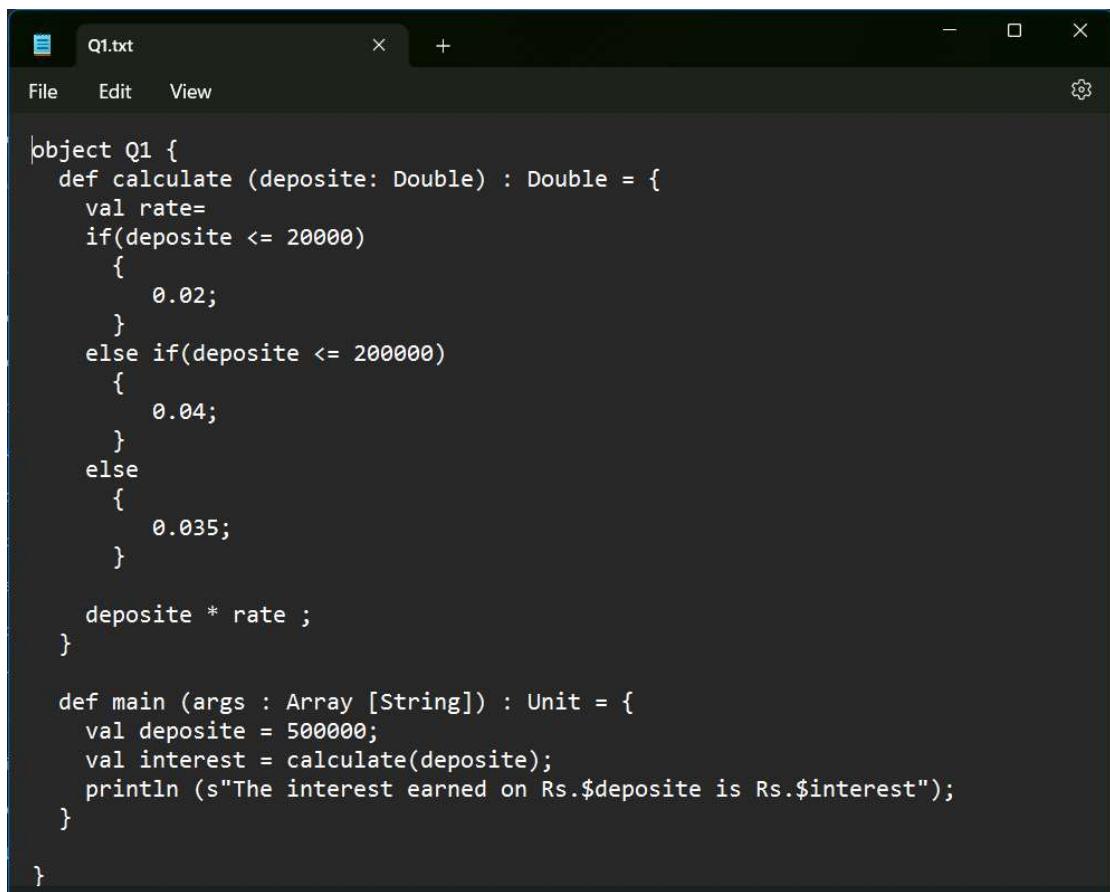


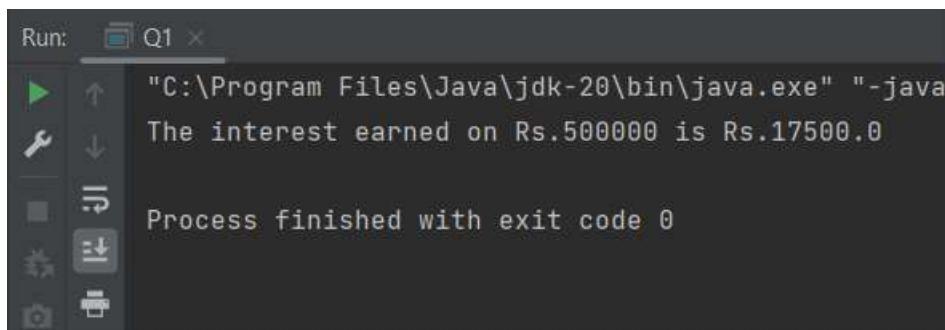
Q1:



```
object Q1 {
    def calculate (deposite: Double) : Double = {
        val rate=
        if(deposite <= 20000)
        {
            0.02;
        }
        else if(deposite <= 200000)
        {
            0.04;
        }
        else
        {
            0.035;
        }

        deposite * rate ;
    }

    def main (args : Array [String]) : Unit = {
        val deposite = 500000;
        val interest = calculate(deposite);
        println (s"The interest earned on Rs.$deposite is Rs.$interest");
    }
}
```



```
Run: Q1 ×
C:\Program Files\Java\jdk-20\bin\java.exe" "-javaagent:D:\Programs\jd-gui\jd-gui.jar" "D:\Programs\jd-gui\Q1.txt"
The interest earned on Rs.500000 is Rs.17500.0
Process finished with exit code 0
```

Q2:

The screenshot shows a code editor window titled "Q2.txt". The file contains the following Scala code:

```
import scala.concurrent.duration.Duration.Zero
object Q2 {
    def calculate (integer: Int) : Unit= {
        if(integer <= 0)
        {
            println("Zero or negative")
        }
        else if(integer % 2 == 0)
        {
            println("Even number")
        }
        else
        {
            println("Odd number")
        }
    }
    def main (args : Array [String]) : Unit = {
        val integer = 53
        val p= calculate(integer)
    }
}
```

The screenshot shows a terminal window titled "Run: Q2". The output shows the command used to run the Java executable and the resulting output from the Scala code execution.

```
"C:\Program Files\Java\jdk-20\bin\java.exe" "-javaagent:D:\Programs\jd-gui\jd-gui.jar" -Dfile.encoding=UTF-8 Q2
Odd number
Process finished with exit code 0
```

Q3:

```
Q3.txt + ⚙
File Edit View

def toLower(s: String): String = s.toLowerCase

def toUpper(s: String, i: Int): String = {
    var str = new StringBuilder(s)
    var c = toUpper(s.charAt(i).toString)
    str.deleteCharAt(i)
    str.insert(i, c).toString()
}

def formatNames(name: String, f: String => String): String = f(name)

def formatNames(name: String, f: (String, Int) => String, index: Int): String = f(name, index)

def main(args: Array[String]): Unit = {
    var arr: Array[String] = Array("Benny", "Niroshan", "Saman", "Kumara")
    println(formatNames(arr(0), toUpper))
    println(formatNames(arr(1), toUpper, 1))
    println(formatNames(arr(2), toLower))
    println(formatNames(arr(3), toUpper, arr(3).length - 1))
}

}
```

```
Run: Q3 ×
▶ C:\Program Files\Java\jdk-20\bin\java.exe" "-javaagent:D:\Programs\IntelliJ IDEA 2023.2.1\lib\idea_rt.jar" -Dfile.encoding=UTF-8
BENNY
NIroshan
saman
KumarA

Process finished with exit code 0
```