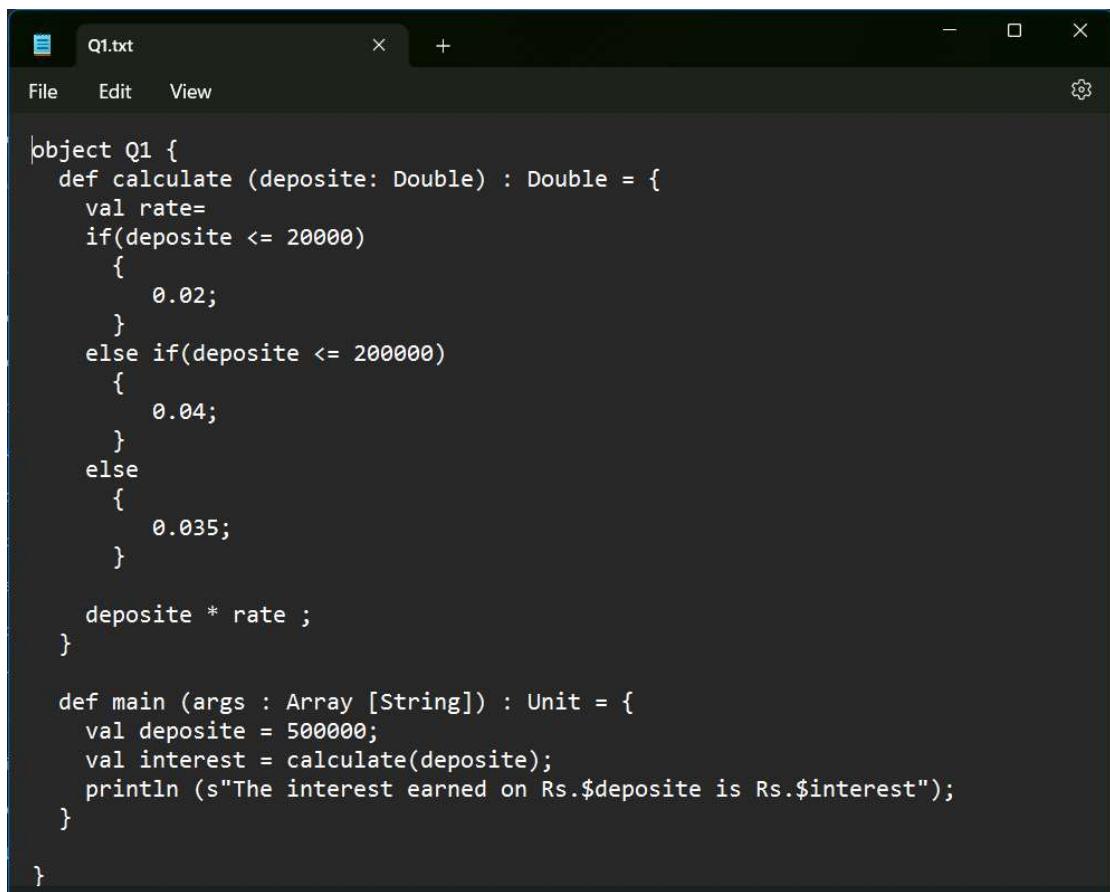


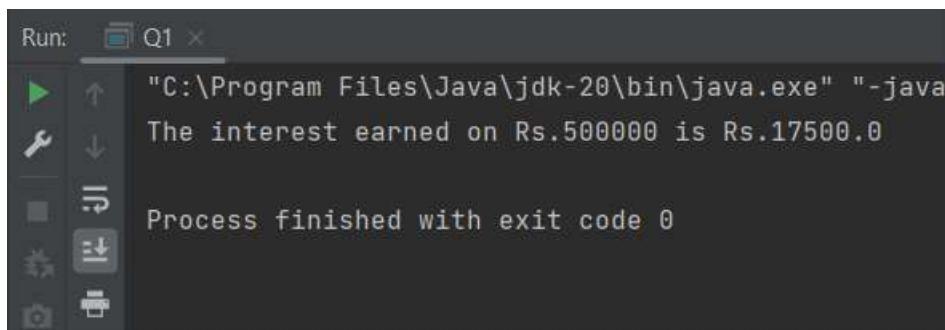
Q1:



```
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:

The screenshot shows a code editor window titled "Q3.txt". The code is written in Scala and defines an object Q3 with several methods: toUpper, toLower, formatNames, and main. The main method takes an array of strings and prints out each name in uppercase and lowercase.

```
| object Q3 {  
|  
|     def toUpper(str: String): String = {  
|         str.toUpperCase;  
|     }  
|  
|     def toLower(str: String): String = {  
|         str.toLowerCase;  
|     }  
|  
|     def formatNames(name: String)(formatFunc: String => String): String = {  
|         formatFunc(name)  
|     }  
|  
|     def main(args: Array[String]): Unit = {  
|         val name = List("BENNEY", "Niroshan", "saman", "KumarA")  
|  
|         for (name <- name) {  
|             var upperCaseName = formatNames(name)(toUpper)  
|             var lowerCaseName = formatNames(name)(toLower)  
|  
|             println(upperCaseName);  
|             println(lowerCaseName);  
|         }  
|     }  
| }
```

The screenshot shows a terminal window titled "Run: Q3". It displays the command being run and the resulting output. The output shows four pairs of names, each pair consisting of an uppercase version followed by a lowercase version.

```
"C:\Program Files\Java\jdk-20\bin\java.exe" "-javaagent:D:\Program Files\JetBrains\IntelliJ IDEA 2023.2.1\lib\idea_rt.jar" -Dfile.encoding=UTF-8 Q3  
BENNEY  
benney  
NIROSHAN  
niroshan  
SAMAN  
saman  
KUMARA  
kumara
```