ASSIGNMENT-1 -Anish.M

1. **Exercism - Day 1 - Hello World!**

```
public class App {
        static String getGreeting() {
            return "Hello, World!";
        }
    public static void main(String[] args) throws Exception {
        System.out.println(getGreeting());
    }
}
```

2. **Write a program to demonstrate compatible type conversions. For eg., float to int, double to float, int to short**

```
class Narraowing{
    public static void main(String[] args) {
        int intNum=255;
        float floatNum=255.000901f;
        double doubleNum=256.09007978901d;
        long longNum=21474836481;
        byte byteNum=1;
        short shortNum=100;
        char character='a';

        System.out.println((float)intNum); //Wideing float,double
        System.out.println((byte)intNum); //Narrowing
        System.out.println((char)intNum); //Narrowing
        System.out.println((byte)floatNum); //Narrowing
        System.out.println((float)doubleNum); //Narrowing getting percise
        System.out.println((int)floatNum); //Narrowing
        System.out.println((long)doubleNum); //Narrowing
        System.out.println((byte)character); //Narrowing
        System.out.println((float)byteNum); //Wideing
        System.out.println((int)'அ'); //Wideing
        System.out.println((int)longNum); //Narrowing
        System.out.println((double)shortNum);
    }
}
```

3. **Create multiple classes in single file and compile and explore how many .class files are generated.**

```
public class NumberOfDifferentClass {

}
class Class1{}
class Class2{}
class Class3{
    class NestedClass{}
}
class Class4{}
class Class5{
    class NestedClass2{}
}
//8 .class files.
//After Compiling the code with many classes, for each class it creates a
.class file.
//creating a nested class (class within a class) also creates a .class file
with outsideclass$insideclass.
```

4. **Write a Java program that gets a number from the user and displays the name of the weekday. Use enum.**

```
import java.util.Scanner;
public class Weekday {
    enum weekdays{
        SUNDAY,
        MONDAY,
        TUESDAY,
        WEDNESDAY,
        THURSDAY,
        FRIDAY,
        SATURDAY;
    }
    // public static void getWeekday(int choice){
    //     switch (choice) {
    //         case 1: System.out.println(weekdays.SUNDAY);
    //             break;
    //         case 2: System.out.println(weekdays.MONDAY);
    //             break;
    //         case 3: System.out.println(weekdays.TUESDAY);
    //             break;
    //         case 4: System.out.println(weekdays.WEDNESDAY);
    //             break;
    //         case 5: System.out.println(weekdays.THURSDAY);
    //             break;
    //         case 6: System.out.println(weekdays.FRIDAY);
    //             break;
    //         case 7: System.out.println(weekdays.SATURDAY);
```

```
    //             break;
    //         default: System.out.println("Select 1 to 7 only.");
    //     }
    // }
    public static void main(String[] args) {
        weekdays[] week=weekdays.values();
        Scanner s=new Scanner(System.in);
        System.out.println(week[(s.nextInt())-1]);
        s.close();
    }
}
```

5. **Write a program that calculates the average weight of 10 people. Use descriptive and meaningful variable names following Java naming conventions. Use proper datatypes for the variables.**

```
import java.util.Scanner;

public class AverageOfTen {
    public static void main(String[] args) {
        Scanner s=new Scanner(System.in);
        float averageWeight=0;
        float sumAverage=0;
        float weights[]=new float[10];
        for(int i=0;i<10;i++){
            weights[i]=s.nextFloat();
        }
        for(int i=0;i<10;i++){
            sumAverage+=weights[i];
        }
        averageWeight=sumAverage/10;
        System.out.println(averageWeight);
        s.close();
    }
}
```