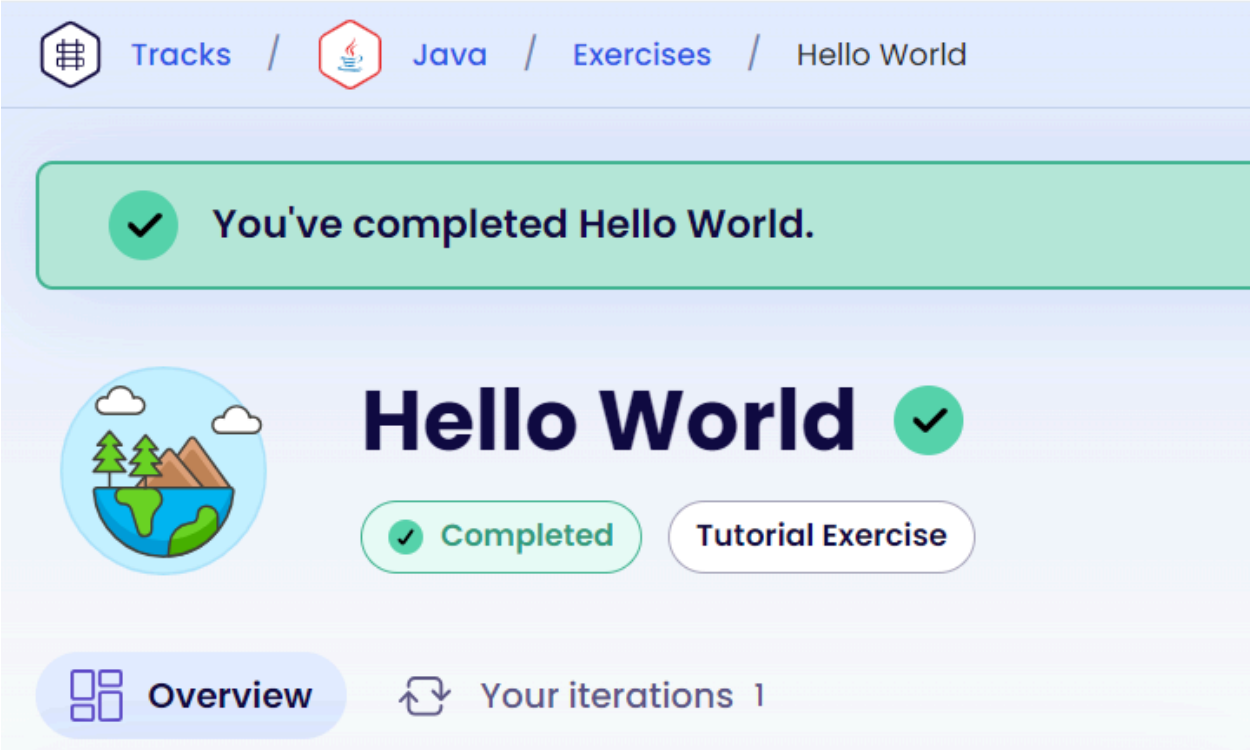
1)



2)

```
class HelloWorld {
    public static void main(String[] args) {


        //byte to other data types
        byte b = 10;

        int a = b;
        double d = b;
        short s = b;
        float f = b;
        long l = b;

        //short to other data types
        s = 10;

        a = s;
        b = (byte)s;
        d = s;
        f = s;
        l = b;
```

```
        //integer to other data types
        a = 10;

        b = (byte)a;
        d = a;
        s = (short)a;
        f =  a;
        l = a;

        //float to other data types
        f = 10.0f;

        a = (int)f;
        b = (byte)f;
        d = f;
        s = (short)f;
        l = (long)f;

        //long to other data types
        l = 10l;

        a = (int)l;
        b = (byte)l;
        d = l;
        s = (short)l;
        f = l;

        //double to other data types
        d = 10.55;

        a = (int)d;
        b = (byte)d;
        s = (short)d;
        f = (float)d;
        l = (long)d;

    }
}
```

3) The number of .class files that will be generated will be the same as the number of classes in the java file. This is because, for every class in the file, a new .class file is created.

4)

```
import java.util.Scanner;

class DaysUsingEnum {

    enum Day    {
        SUNDAY,
        MONDAY,
        TUESDAY,
        WEDNESDAY,
        THURSDAY,
        FRIDAY,
        SATURDAY;
    }
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter a number");
        int day = sc.nextInt();

        switch(day) {
            case 1:
                System.out.println(Day.SUNDAY);
                break;

            case 2:
                System.out.println(Day.MONDAY);
                break;

            case 3:
                System.out.println(Day.TUESDAY);
                break;

            case 4:
                System.out.println(Day.WEDNESDAY);
                break;

            case 5:
                System.out.println(Day.THURSDAY);
                break;

            case 6:
                System.out.println(Day.FRIDAY);
                break;

            case 7:
```

```
            System.out.println(Day.SATURDAY);
            break;
        }
    }
}
```

5)

AverageWeightOfPeople.java

```
import java.util.Scanner;


class AverageWeightOfPeople {
    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        float totalWeight;
        int totalCount = 10;

        for(int personCount=0; personCount<totalCount; personCount++)   {
            System.out.println("Please enter the weight");
            float personWeight = sc.nextFloat();
            totalWeight += personWeight;
        }

        float avgWeight = totalWeight / totalCount;
        System.out.println("The average weight of " +totalCount+ " people is " + avgWeight);
    }
}
```