Basic Programming Practicum
Jobsheet 5 Assignment

Name

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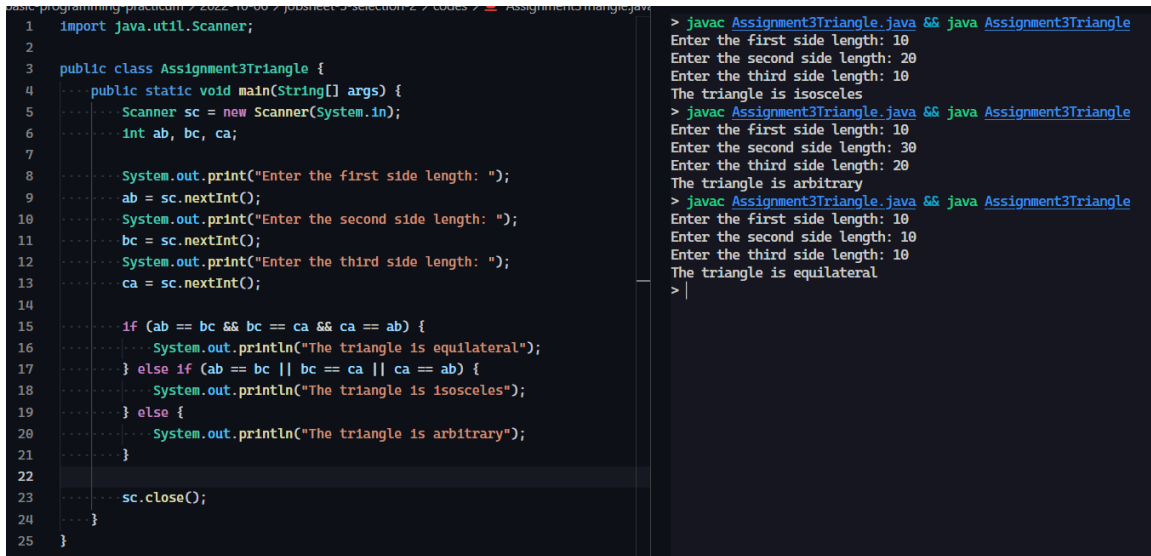
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Class

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Department

Information Technology

Study Program

D4 Informatics Engineering

1 Assignment

1. Using three values that represent the lengths of the three sides of a triangle, determine whether the triangle is **equilateral** (all three sides are equal), **isosceles** (both sides are equal), or **arbitrary** (no sides are equal)!


```java
import java.util.Scanner;

public class Assignment3Triangle {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int ab, bc, ca;

        System.out.print("Enter the first side length: ");
        ab = sc.nextInt();
        System.out.print("Enter the second side length: ");
        bc = sc.nextInt();
        System.out.print("Enter the third side length: ");
        ca = sc.nextInt();

        if (ab == bc && bc == ca && ca == ab) {
            System.out.println("The triangle is equilateral");
        } else if (ab == bc || bc == ca || ca == ab) {
            System.out.println("The triangle is isosceles");
        } else {
            System.out.println("The triangle is arbitrary");
        }

        sc.close();
    }
}
```

```
> javac Assignment3Triangle.java && java Assignment3Triangle
Enter the first side length: 10
Enter the second side length: 20
Enter the third side length: 10
The triangle is isosceles
> javac Assignment3Triangle.java && java Assignment3Triangle
Enter the first side length: 10
Enter the second side length: 30
Enter the third side length: 20
The triangle is arbitrary
> javac Assignment3Triangle.java && java Assignment3Triangle
Enter the first side length: 10
Enter the second side length: 10
Enter the third side length: 10
The triangle is equilateral
>
```

Figure 1: Code and output to find triangle sides

2. A restaurant asks you to create a program for taking orders from the internet. The program you created asks the user to enter a food name and price. After that, the user is offered to use express delivery. If the user refuses, the delivery type used is regular delivery. Regular delivery costs for food less than IDR 100,000 are IDR 20,000, while for food prices equal to or more than IDR 100,000 the delivery cost is IDR 30,000. For express delivery, add an additional fee of IDR 25,000 from the standard regular shipping cost. Show a receipt containing the name of the food purchased + price, shipping costs and the total to be paid!


```java
import java.util.Scanner;

public class Assignment3Restaurant {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        String foodName;
        int foodPrice, shippingCost;
        boolean isUsingExpressDelivery;

        System.out.print("Enter a food name: ");
        foodName = sc.next();
        System.out.print("Enter the food price: ");
        foodPrice = sc.nextInt();
        System.out.print("Do you want express delivery (0 = no, 1 = yes)? ");
        isUsingExpressDelivery = sc.nextInt() == 1;

        shippingCost = foodPrice < 100_000 ? 20_000 : 30_000;

        if (isUsingExpressDelivery) {
            shippingCost += 25_000;
        }

        System.out.println("RECEIPT");
        System.out.printf("%s\t\t\tIDR %s\n", foodName, foodPrice);
        System.out.printf("Shipping Cost\t\t\tRp %s (%s)\n", shippingCost, isUsingExpressDelive
        System.out.printf("TOTAL\t\t\tRp %s\n", foodPrice + shippingCost);

        sc.close();
    }
}
```

```
> javac Assignment3Restaurant.java && java Assignment3Restaurant
Enter a food name: Bulgogi
Enter the food price: 50000
Do you want express delivery (0 = no, 1 = yes)? 1
RECEIPT
Bulgogi                 IDR 50000
Shipping Cost           Rp 45000 (express)
TOTAL                   Rp 95000
> javac Assignment3Restaurant.java && java Assignment3Restaurant
Enter a food name: Ramen
Enter the food price: 75000
Do you want express delivery (0 = no, 1 = yes)? 0
RECEIPT
Ramen                   IDR 75000
Shipping Cost           Rp 20000 (regular)
TOTAL                   Rp 95000
>
```

Figure 2: Code and output to calculate total price for a restaurant