

ACTIVITY 3.1

Ramzy Izza Wardhana - 21/472698/PA/20322

Source Code:

```
public class Activity {
    public static void main(String[] args) throws Exception {
        System.out.println(getRandomNumber());

        System.out.println(getAbsoluteValue(-100));

        System.out.println(getFactorial(5));

        System.out.println(getWeatherForecast());

        System.out.println(getRandomMessage("Ramzy"));

        System.out.println(isEvenNumber(10));

        System.out.println(isSameAbsoluteValue(-5, 5));

        getMessage("Ramzy", false);

        System.out.println(getSum(0.12443, 0.74648, 1.47392));

        System.out.println(getAverage(8.3739, 3.2826, 4.94673));
    }

    public static int getRandomNumber(){
        int number = (int)(Math.random()*100);
        return number;
    }

    public static double getAbsoluteValue(double value){
        double absNum = Math.abs(value);
        return absNum;
    }

    public static int getFactorial(int n){
        int numFact = 1;
        for(int i = 1; i <= n; i++){
```

```

        numFact = numFact * i;
    }
    return numFact;
}

public static String getWeatherForecast() {
    int dayDetermine = (int) Math.random() * 10;
    int weatherDetermine = (int) (Math.random() * 5);
    String day, weather;

    if (dayDetermine == 1) {
        day = "Today ";
    }
    else if (dayDetermine == 2) {
        day = "Tomorrow ";
    }
    else {
        day = "The day after Tomorrow ";
    }

    if (weatherDetermine == 1) {
        weather = "Sunny ";
    }
    else if (weatherDetermine == 2) {
        weather = "Cloudy ";
    }
    else if (weatherDetermine == 3) {
        weather = "Rainy ";
    }
    else {
        weather = "Snowy ";
    }

    return day + "would be " + weather;
}

public static String getRandomMessage(String name){
    int determine = (int) (Math.random() * 4);
    String message;
    if (determine == 1) {
        message = "Good Morning ";
    }
}

```

```

        else if (determine == 2) {
            message = "Good Afternoon ";
        }
        else {
            message = "Good Night ";
        }

        return message + name;
    }

    public static boolean isEvenNumber(int value){
        boolean check;
        if (value % 2 == 0){
            check = true;
        }
        else {
            check = false;
        }
        return check;
    }

    public static boolean isSameAbsoluteValue(int i, int j){
        int num1 = Math.abs(i);
        int num2 = Math.abs(j);
        boolean check;
        if(num1 == num2){
            check = true;
        }
        else{
            check = false;
        }
        return check;
    }

    public static void getMessage(String name, boolean isKid){
        if(!isKid){
            System.out.println("Halo Pak " + name);
        }
        else{
            System.out.println("Halo Dek " + name);
        }
    }
}

```

```

    public static double getSum(double a, double b, double c){
        double sum = a + b + c;
        return sum;
    }

    public static double getAverage(double a, double b, double c){
        double avg = (a + b + c) /3;
        return avg;
    }
}

```

Output

```

allExceptionHandlerMessages -cp C:\Users\them1\Downloads\java-prak
53
100.0
120
The day after Tomorrow would be Snowy
Good Afternoon Ramzy
true
true
Halo Pak Ramzy
2.34483
5.53441
PS C:\Users\them1\Downloads\java-prak-asd\third-meet\activity-3>

```

5.53441

PS C:\Users\themi\Downloads\java-prak-asd\third-meet\activity-3>
ailsInExceptionMessages' '-cp' 'C:\Users\themi\Downloads\java-prak

86

100.0

120

The day after Tomorrow would be Snowy

Good Morning Ramzy

true

true

Halo Pak Ramzy

2.34483

5.53441

PS C:\Users\themi\Downloads\java-prak-asd\third-meet\activity-3>