**#Program to demonstrate Methods with return and without return**

public class Main

{

public static void main(String[] args)

{

// Define variables

String nonReturnMessage = "Hello World from printMessage method!";

String returnMessage;

// Call the method without return

printMessage(nonReturnMessage);

// Call the method with return and print its result

returnMessage = getMessage();

System.out.println(returnMessage);

}

// Method without return

public static void printMessage(String message)

{

System.out.println(message);

}

// Method with return

public static String getMessage()

{

return "Hello World from getMessage method!";

}

}

**OUTPUT**

Hello World from printMessage method!

Hello World from getMessage method!

=== Code Execution Successful ===

**#Retrun and withoutreturn with Addition Program**

public class Main

{

public static void main(String[] args)

{

// Define two numbers

int num1 = 5;

int num2 = 10;

// Call the method without return

performAdditionWithoutReturn(num1, num2);

// Call the method with return and print its result

int result = performAdditionWithReturn(num1, num2);

System.out.println("The result from performAdditionWithReturn: " + result);

}

// Method without return

public static void performAdditionWithoutReturn(int a, int b)

{

int sum = a + b;

System.out.println("The sum from performAdditionWithoutReturn: " + sum);

}

// Method with return

public static int performAdditionWithReturn(int a, int b)

{

return a + b;

}

}

**OUTPUT**

The sum from performAdditionWithoutReturn: 15

The result from performAdditionWithReturn: 15

=== Code Execution Successful ===

public class Main

{

public static void main(String[] args)

{

// Call the method with name, mobile, and email

String userDetails = getUserDetails("kitty", "1234567890", "kitty.abc@example.com");

System.out.println(userDetails);

}

// Method with name, mobile, and email as arguments and return

public static String getUserDetails(String name, String mobile, String email)

{

return "Name: " + name + ", Mobile: " + mobile + ", Email: " + email;

}

}

OUTPUT

Name: kitty, Mobile: 1234567890, Email: kitty.abc@example.com

=== Code Execution Successful ===

**#Simple Interest**

public class Main

{

public static void main(String[] args)

{

double principal = 1000;

double rate = 5;

double time = 2;

calculateSimpleInterestWithoutReturn(principal, rate, time);

double interest = calculateSimpleInterestWithReturn(principal, rate, time);

System.out.println("The Simple Interest (from method with return): " + interest);

}

public static void calculateSimpleInterestWithoutReturn(double p, double r, double t)

{

double interest = (p \* r \* t) / 100;

System.out.println("The Simple Interest (from method without return): " + interest);

}

public static double calculateSimpleInterestWithReturn(double p, double r, double t)

{

return (p \* r \* t) / 100;

}

}

OUTPUT:

The Simple Interest (from method without return): 100.0

The Simple Interest (from method with return): 100.0

=== Code Execution Successful ===

#Lagest of 3 number

public class Main {

public static void main(String[] args) {

int a = 10;

int b = 25;

int c = 15;

int max = findMaximum(a, b, c);

System.out.println("The maximum of the three numbers is: " + max);

}

public static int findMaximum(int a, int b, int c)

{

if (a >= b && a >= c)

{

return a;

}

else if (b >= a && b >= c)

{

return b;

}

else

{

return c;

}

}

}

The maximum of the three numbers is: 25

=== Code Execution Successful ===

#Electricity Problem

1. If the **units** are **less than or equal to 100**, the charge is **₹0.50 per unit**.
2. If the **units are between 101 and 200**, the charge is **₹1.00 per unit**.
3. If the **units are more than 200**, the charge is **₹1.50 per unit**.

public class Main

{

public static void main(String[] args)

{

int units = 250;

double billAmount = calculateBill(units);

System.out.println("\n--- Electricity Bill Report ---");

System.out.println("Units Consumed: " + units);

System.out.println("Total Bill: " + billAmount);

}

public static double calculateBill(int units) {

double bill = 0.0;

if (units <= 100)

{

bill = units \* 0.50;

}

else if (units <= 200)

{

bill = 100 \* 0.50 + (units - 100) \* 1.00;

}

else

{

bill = 100 \* 0.50 + 100 \* 1.00 + (units - 200) \* 1.50;

}

return bill;

}

}

**OUTPUT:**

--- Electricity Bill Report ---

Units Consumed: 250

Total Bill: 225.0

=== Code Execution Successful ===