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Batch Code: ANP-C6315

Lab Assignment – 1

Question 1: Write a program to read values for all primitive datatypes including String And display them on the console.

INPUT:

```java
import java.util.Scanner;

public class PrimitiveDataTypesExample {

  public static void main(String[] args) {

    Scanner scanner = new Scanner(System.in);


    // Read values for primitive data types

    System.out.print("Enter an integer: ");

    int intValue = scanner.nextInt();


    System.out.print("Enter a byte: ");

    byte byteValue = scanner.nextByte();


    System.out.print("Enter a short: ");

    short shortValue = scanner.nextShort();


    System.out.print("Enter a long: ");

    long longValue = scanner.nextLong();


    System.out.print("Enter a float: ");

    float floatValue = scanner.nextFloat();
```

```java
System.out.print("Enter a double: ");

double doubleValue = scanner.nextDouble();


// Clear the newline character from the input buffer

scanner.nextLine();


System.out.print("Enter a character: ");

char charValue = scanner.nextLine().charAt(0);


System.out.print("Enter a boolean (true or false): ");

boolean booleanValue = scanner.nextBoolean();


// Clear the newline character from the input buffer

scanner.nextLine();


System.out.print("Enter a string: ");

String stringValue = scanner.nextLine();


// Display the values

System.out.println("Entered integer: " + intValue);

System.out.println("Entered byte: " + byteValue);

System.out.println("Entered short: " + shortValue);

System.out.println("Entered long: " + longValue);

System.out.println("Entered float: " + floatValue);

System.out.println("Entered double: " + doubleValue);

System.out.println("Entered character: " + charValue);
```

```java
        System.out.println("Entered boolean: " + booleanValue);

        System.out.println("Entered string: " + stringValue);


        // Close the scanner

        scanner.close();
    }
}
```

OUTPUT:

```
Enter an integer: 42

Enter a byte: 5

Enter a short: 1000

Enter a long: 1234567890

Enter a float: 3.14

Enter a double: 2.71828

Enter a character: A

Enter a boolean (true or false): true

Enter a string: Hello, World!


Entered integer: 42

Entered byte: 5

Entered short: 1000

Entered long: 1234567890

Entered float: 3.14

Entered double: 2.71828

Entered character: A

Entered boolean: true

Entered string: Hello, World!
```

Question 2: Create a program that takes two numbers as input from the user and performs basic arithmetic operations (addition, subtraction, multiplication, division) and display

INPUT:

```java
import java.util.Scanner;

public class ArithmeticOperations {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter the first number: ");

        double num1 = scanner.nextDouble();

        System.out.print("Enter the second number: ");

        double num2 = scanner.nextDouble();

        // Perform arithmetic operations

        double sum = num1 + num2;

        double difference = num1 - num2;

        double product = num1 * num2;

        double quotient = num1 / num2;

        // Display the results

        System.out.println("Sum: " + num1 + " + " + num2 + " = " + sum);

        System.out.println("Difference: " + num1 + " - " + num2 + " = " + difference);

        System.out.println("Product: " + num1 + " * " + num2 + " = " + product);

        System.out.println("Quotient: " + num1 + " / " + num2 + " = " + quotient);

        scanner.close();

    }

}
```

OUTPUT:

Enter the first number: 5

Enter the second number: 3

Sum: 5.0 + 3.0 = 8.0

Difference: 5.0 - 3.0 = 2.0

Product: 5.0 * 3.0 = 15.0

Quotient: 5.0 / 3.0 = 1.6666666666666667