Program 1: Insert Element into Array

```
public class InsertArray {
    public static void main(String[] args) {
        int[] arr = {1, 2, 4, 5};
        int pos = 2;
        int val = 3;

        for (int i = arr.length - 1; i > pos; i--) {
            arr[i] = arr[i - 1];
        }
        arr[pos] = val;

        for (int num : arr) {
                System.out.print(num + " ");
        }
    }
}
```

• Inserts 3 at position 2 in the array.

Program 2: Find Maximum Element

```
public class MaxInArray {
  public static void main(String[] args) {
    int[] arr = {4, 7, 2, 9, 5};
    int max = arr[0];

  for (int num : arr) {
      if (num > max) max = num;
    }

    System.out.println("Max = " + max);
  }
}
```

• Finds the largest element in a simple integer array.

B. Simple String Manipulations

Program 1: String Length and Concatenation

```
public class StringBasic {
   public static void main(String[] args) {
      String s1 = "Hello";
      String s2 = "World";

      System.out.println("Length: " + s1.length());
      System.out.println("Combined: " + s1 + " " + s2);
   }
}
```

• Shows how to get length and join two strings.

Program 2: Reverse a String

```
public class ReverseString {
   public static void main(String[] args) {
      String str = "Java";
      String rev = "";

   for (int i = str.length() - 1; i >= 0; i--) {
      rev += str.charAt(i);
   }

   System.out.println("Reversed: " + rev);
}
```

• Reverses the string "Java" using a loop.

Would you like these saved as .java files or formatted as a student worksheet?