

SCS2208 Rapid Application Development

Activity 01

Type Coercion

Upload a **pdf** containing screenshots of the result and the code with answers to the given questions. You have to submit to the VLE on or before **12th June 2024 at 11.59PM**. Name your file using your **index number**. For example, if your index number is "22001234", your file should be named **22001234.pdf**

Type the following commands and observe the output:

1. String Coercion:

```
console.log("5" + 10);  
console.log("Hello" + true);  
console.log("The result is: " + 42);
```

Explain why the numbers and booleans are converted to strings in these examples.

2. Number Coercion:

```
console.log("10" - 5);  
console.log("3" * "4");  
console.log("20" / "5");
```

Explain why the strings are converted to numbers in these arithmetic operations

3. Boolean Coercion:

```
console.log(true + 2);  
console.log(false * 10);  
console.log(1 + false);
```

Explain how booleans are converted to numbers (true to 1, false to 0) in these examples.

4. Null and Undefined Comparisons:

```
console.log(null == undefined); // true  
console.log(null == 0); // false
```

```
console.log(undefined == 0); // false
```

Discuss why null and undefined are only equal to each other and not to any other values.

5. What will be the output of the following?

```
console.log("5" - 3);  
console.log(true + "10");  
console.log(false == 0);  
console.log({} + "test");  
console.log([] + 1);
```