The SWITCH Statement

A byte size lesson in Java programming.

Why use a SWITCH Loop?

- In Java, the SWITCH statement allows us to specify different alternatives for a block of code, based on an expression.
- It's similar to use if..else..if... Multiple times. For cases where we need to choose between multiple alternatives, the switch is much cleaner.

```
switch (expression) {
  case value1:
    //code
    break;

  case value2:
    //code
    break;

  ...
}
```

Breaking it down

```
switch (expression) {
...
}
```

- The first part is the switch, where we need to pass an expression to be evaluated.
- Based on this, the respective ‘case’ statement will execute

Let's test your understanding!

- What will the value of size be after the following executes?

```
int number = 44;
String size;
switch (number) {
  case 43:
    size = "Medium";
    break;

  case 44:
    size = "Large"
    break;

  ...
}
```

Why the ‘break’?

```
int number = 44;
String size;
switch (number) {
  case 43:
    size = “Medium”;
    break;

  case 44:
    size = “Large”
    break;

  ...
}
```

- We need a ‘break’ in every ‘case’ statement, so that the switch-case statement is terminated.
- Without the ‘break’, all other cases after the matching case are also executed.

Using a default

```
int number = 44;
String size;
switch (number) {
  case 43:
    size = “Medium”;
    break;

  case 44:
    size = “Large”
    break;

  default:
    println(“No match!”);
    break;

  ...
}
```

- The default is the catch-all which is used if none of the cases match the expression

- What will this code output?

```
class Main {
  public static void main(String[] args) {

    int expression = 2;

    // switch statement to check size
    switch (expression) {
      case 1:
        System.out.println("Case 1");

        // matching case
      case 2:
        System.out.println("Case 2");

      default:
        System.out.println("Default case");
    }
  }
}
```

- What will this code output?

```
class Main {
  public static void main(String[] args) {

    int expression = 3;

    // switch statement to check size
    switch (expression) {
      case 1:
        System.out.println("Case 1");
        break;

        // matching case
      case 2:
        System.out.println("Case 2");
        break;

      default:
        System.out.println("Default case");
        break;
    }
  }
}
```