Selection Statements

January 2, 2025

[1]:
```
val num = 15
if (num % 2 == 0) {
  println("The number is even.")
} else {
  println("The number is odd.")
}
```

```
The number is odd.
```

```
num = 15
```

[1]: 15

[2]:
```
val marks = 73

if (marks >= 90) {
  println("Grade: A")
} else if (marks >= 75) {
  println("Grade: B")
} else if (marks >= 50) {
  println("Grade: C")
} else {
  println("Grade: Fail")
}
```

```
Grade: C
```

```
marks = 73
```

[2]: 73

[3]:
```
val temperature = 35
val weather = if (temperature > 30) "Hot" else "Cool"
println(s"The weather is $weather.")
```

```
The weather is Hot.
```

```
temperature = 35
weather = Hot
```

[3]: Hot

[4]:
```
val speed = 80

if (speed > 60) {
  println("Over Speeding")
  if (speed > 100) {
    println("You are driving dangerously fast!")
  } else {
    println("Please slow down.")
  }
} else {
  println("Your speed is within limits.")
}
```

```
Over Speeding
Please slow down.
```

```
speed = 80
```

[4]: 80

[5]:
```
val day = "Friday"

day match {
  case "Monday" => println("Start of the workweek.")
  case "Friday" => println("Almost weekend!")
  case "Sunday" => println("Rest day.")
  case _ => println("Just another day.")
}
```

```
Almost weekend!
```

```
day = Friday
```

[5]: Friday

[6]:
```
def identify(value: Any): Unit = {
  value match {
    case i: Int => println(s"An Integer: $i")
    case s: String => println(s"A String: $s")
    case d: Double => println(s"A Double: $d")
    case _ => println("Unknown type")
  }
}
```

```
identify(42)
identify("Scala")
identify(3.14)
identify(true)
```

```
identify: (value: Any)Unit


An Integer: 42
A String: Scala
A Double: 3.14
Unknown type
```

[7]:
```
val number = 15

number match {
  case x if x > 0 => println("Positive number")
  case x if x < 0 => println("Negative number")
  case _ => println("Zero")
}
```

```
Positive number

number = 15
```

[7]: 15

[8]:
```
val list = List(1, 2, 3)

list match {
  case List(1, _, _) => println("List starts with 1")
  case List(_, 2, _) => println("List has 2 in the middle")
  case _ => println("Unknown pattern")
}
```

```
List starts with 1

list = List(1, 2, 3)
```

[8]: List(1, 2, 3)

[ ]: