**LAB1:**

**Muhammad Wahaj (22SP-059-CS)**

**Task1:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1st Type | 2nd Type | Poss  ible? | Reason | Example Code |
| SInt | SInt | Yes | Both are signed integer types. | N/A |
| SInt | UInt | Yes | Implicit conversion from signed to unsigned. | val value2: UInt = value1.asUInt() |
| UInt | UInt | Yes | Both are unsigned integer types. | N/A |
| Clock | UInt | No | Clock and UInt are fundamentally different types. | N/A |
| UInt | Bool | No | Cannot directly convert UInt to Bool. | N/A |
| Bool | Bool | Yes | Both are boolean types. | N/A |
| Bool | UInt | No | Cannot directly convert Bool to UInt. | N/A |
| UInt | SInt | Yes | Implicit conversion from unsigned to signed. | val value2: SInt = value1.asSInt() |
| SInt | Int | Yes | Implicit conversion from signed to signed. | val value2: Int = value1.toInt() |
| Int | Int | Yes | Both are signed integer types. | N/A |
| Int | SInt | Yes | Implicit conversion from signed to signed. | val value2: SInt = value1.asSInt() |
| SInt | UInt | Yes | Implicit conversion from signed to unsigned. | val value2: UInt = value1.asUInt() |
| UInt | UInt | Yes | Both are unsigned integer types. | N/A |