|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Opcode | DR | SA | SB |
| Binary | 00000000000110101 | 00010 | 00010 | 00011 |
| Decimal | 53 | 2 | 2 | 3 |

The instruction, 00000000000110101000100001000011, is split into 4 parts, the Opcode, DR, SA and SB, with the Opcode going to the multiplexer before the CAR and the other values going to the register file.

The opcode value is the 4th and 3rd values of my student ID (5 and 3)

The DR value is digit 0 from my student ID (2)

The SA value is digit 1 from my student ID (2)

The SB value is digit 2 from my student ID (3)