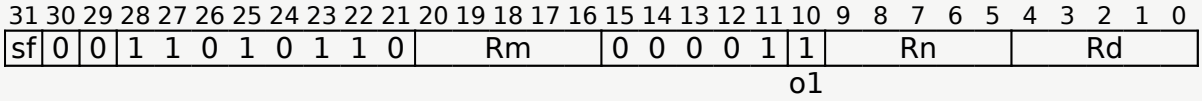
SDIV

Signed Divide divides a signed integer register value by another signed integer register value, and writes the result to the destination register. The condition flags are not affected.



32-bit (sf == 0)

```
SDIV <Wd>, <Wn>, <Wm>
```

64-bit (sf == 1)

```
SDIV <Xd>, <Xn>, <Xm>
```

```
integer d = UInt(Rd);
integer n = UInt(Rn);
integer m = UInt(Rm);
constant integer datasize = 32 << UInt(sf);
```

Assembler Symbols

<Wd>	Is the 32-bit name of the general-purpose destination register, encoded in the "Rd" field.
<Wn>	Is the 32-bit name of the first general-purpose source register, encoded in the "Rn" field.
<Wm>	Is the 32-bit name of the second general-purpose source register, encoded in the "Rm" field.
<Xd>	Is the 64-bit name of the general-purpose destination register, encoded in the "Rd" field.
<Xn>	Is the 64-bit name of the first general-purpose source register, encoded in the "Rn" field.
<Xm>	Is the 64-bit name of the second general-purpose source register, encoded in the "Rm" field.

Operation

```
bits(datasize) operand1 = X[n, datasize];
bits(datasize) operand2 = X[m, datasize];
integer result;

if IsZero(operand2) then
    result = 0;
```

```
    else
        result = RoundTowardsZero(Real(Int(operand1, FALSE)) / Real(Int(ope

    X[d, datasize] = result<datasize-1:0>;
```

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