

```

part ifelse_chain
{
    public bit[4] control;
    public bit[5] in;
    public bit out;

    /* Awful, convoluted style, but should be valid */
    if (control[0] == 1)
        out = in[0];
    else if (control[1] == 1)
    {
        out = in[1];
    }
    else if (control[2] == 1)
        if (control[3] == 1)
            out = in[2];
        else
            out = in[3];
    else
        out = in[4];
}

```

**REMINDER:** Let's use “jiffy” as the unit of time in which one step in the simulation occurs.

```

part ifelse_chain
{
    public bit[4] control;
    public bit[5] in = b11011;
    public bit out;

    /* Awful, convoluted style, but should be valid */
    if (control[0] == 1)
        out = in[0];
    else if (control[1] == 1)
    {
        out = in[1];
    }
    else if (control[2] == 1)
        if (control[3] == 1)
            out = in[2];
        else
            out = in[3];
    else
        out = in[4];
}

```

```

part ifelse_chain
{
    public bit[4] control = b0001;
    public bit[5] in = b11011;
    public bit out;

    /* Awful, convoluted style, but should be valid */
    if (control[0] == 1)
        out = in[0];
    else if (control[1] == 1)
    {
        out = in[1];
    }
    else if (control[2] == 1)
        if (control[3] == 1)
            out = in[2];
        else
            out = in[3];
    else
        out = in[4];
}

```

```

part ifelse_chain
{
    public bit[4] control = b0001;
    public bit[5] in = b11011;
    public bit out;

    /* Awful, convoluted style, but should be valid */
    if (control[0] == 1)
        out = in[0];
    else if (control[1] == 1)
    {
        out = in[1];
    }
    else if (control[2] == 1)
        if (control[3] == 1)
            out = in[2];
        else
            out = in[3];
    else
        out = in[4];
}

```

```

part ifelse_chain
{
    public bit[4] control = b0001;
    public bit[5] in = b11011;
    public bit out;

    /* Awful, convoluted style, but should be valid */
    if (control[0] == 1)
        out = in[0];
    else if (control[1] == 1)
    {
        out = in[1];
    }
    else if (control[2] == 1)
        if (control[3] == 1)
            out = in[2];
        else
            out = in[3];
    else
        out = in[4];
}

```

```

part ifelse_chain
{
    public bit[4] control = b0001;
    public bit[5] in = b11011;
    public bit out = b1;

    /* Awful, convoluted style, but should be valid */
    if (control[0] == 1)
        out = in[0];
    else if (control[1] == 1)
    {
        out = in[1];
    }
    else if (control[2] == 1)
        if (control[3] == 1)
            out = in[2];
        else
            out = in[3];
    else
        out = in[4];
}

```