

Template Week 4 – Software

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Bonus point assignment – week 4

Like the factorial example, you can also implement the calculation of a power of 2 in assembly. For example you want to calculate $2^4 = 16$. Use iteration to calculate the result. Store the result in r0.

Main:

```
mov r0, #1
```

```
mov r1, #2
```

```
mov r2, #4
```

Loop:

```
sub r2, r2, #1
```

```
mul r0, r1, r0
```

```
cmp r2, #0
```

```
bne Loop
```

End: